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Wisconsin Timber Industry—An Assessment of Timber Product Output and Use, 1996

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FOREWORD

In this bulletin we discuss recent Wisconsin forest industry trends and report the results of a detailed study of the forest industry, industrial roundwood production, and associated primary mill wood and bark residue in Wisconsin in 1996. Such detailed information is necessary for intelligent planning and decisionmaking in wood procurement, forest resources management, and forest industry development. Likewise, researchers need current forest industry and industrial roundwood information for planning projects.

Special thanks are given to the primary wood-using firms for supplying information for this study and to the Wisconsin Department of Natural Resources for canvassing the respondents. Their cooperation is greatly appreciated.

All board foot data in this report have been converted to International 1/4-inch scale by applying a multiplier of 1.08 to all saw log volumes reported in Scribner Decimal C scale by sawmills; a multiplier of 1.04 to all veneer log volume reported in Scribner Decimal C scale by veneer mills; a multiplier of 1.38 to all saw log volume reported in Doyle scale by sawmills; and a multiplier of 1.14 to all veneer log volume reported in Doyle scale by veneer mills.

The last published report from a detailed study of all industrial roundwood output in Wisconsin was in 1994. Most comparisons in this report are with the 1994 study results. Rows and columns may not sum due to rounding, but data in each table cell are accurately displayed.

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Wisconsin Timber Industry—An Assessment of Timber Product Output and Use, 1996

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HIGHLIGHTS

PRIMARY TIMBER INDUSTRY—INDUSTRIAL ROUNDWOOD

- In 1996, Wisconsin's primary wood-using industry was comprised of 322 mills, not including 100 sawmills that each processed less than 50 thousand board feet in 1996 (table 1).

- Almost 90 percent of the State's primary wood-using mills are located in the Northeast, Northwest, and Central Forest Survey Units (fig. 1).

- Between 1994 and 1996, the total number of Wisconsin's primary wood-using mills decreased by eight mills. The number of sawmills decreased by 13 mills, while all other types of mills increased in number.

- In 1996, Wisconsin's primary wood-using industry processed more than 393 million cubic feet of roundwood—a decline of less than 1 percent since 1994 (table 2).

- Wisconsin's 22 pulp and particleboard mills processed nearly 261 million cubic feet of roundwood in 1996, less than 1 million cubic feet under the 1994 level. Pulpwood produced in 1996 was more than twice that processed by the numerous sawmills that year and accounted for two-thirds of the roundwood processed.

- Hardwoods made up nearly three-quarters of the roundwood processed by the State's primary wood-using industry in 1996.

- In 1996, 359.4 million cubic feet of industrial roundwood were harvested from Wisconsin's forests—a nearly 5-percent decrease from 1994 (table 3). Softwoods increased by nearly 1 percent between 1994 and 1996, while hardwoods decreased by over 6 percent.

- The increase in softwood production was associated with the increased use of the majority of softwoods in both saw logs and pulpwood. Softwood veneer log production actually decreased for most softwood species.

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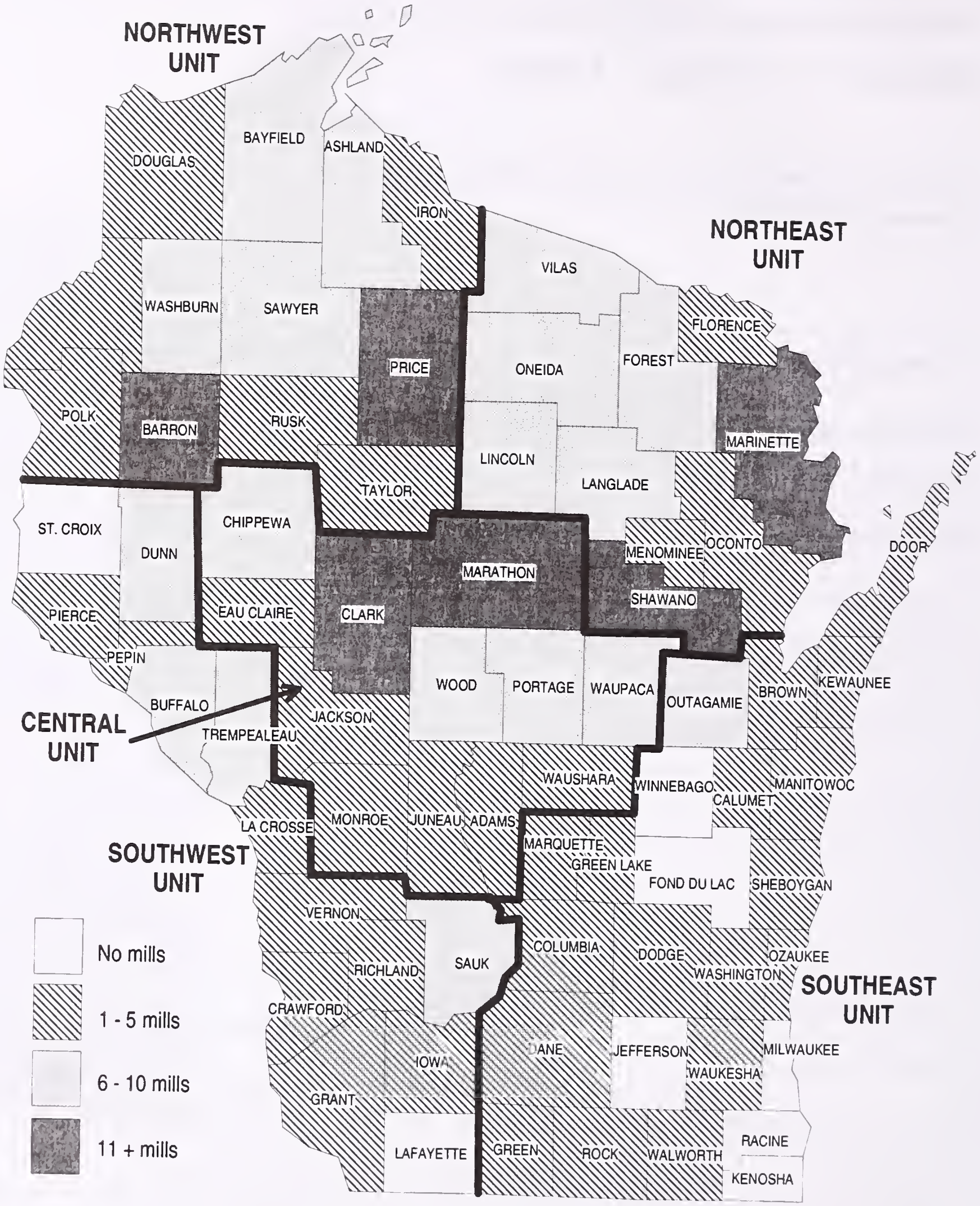


Figure 1.—*Location and number of primary wood-using mills in Wisconsin, 1996.*

- The decrease in hardwood production was associated with the decreased use of aspen and both the red oak and white oak groups in all the major uses and the decline in the volume of hardwood veneer logs between 1994 and 1996.

- Nearly two-thirds of the industrial roundwood produced went to the production of pulpwood products (fig. 2).

- The State's industrial roundwood production was concentrated in the two northern Forest Survey Units, which together provided 70 percent of the State's 1996 production. The Central Unit provided another 20 percent of the industrial roundwood (fig. 3).

- Nearly all the industrial fuelwood (98 percent) and three-quarters of the pulpwood production came from the Northeast and Northwest Units combined. These two units also provided more than 67 percent of the veneer log production and more than 56 percent of the saw log production in the State.

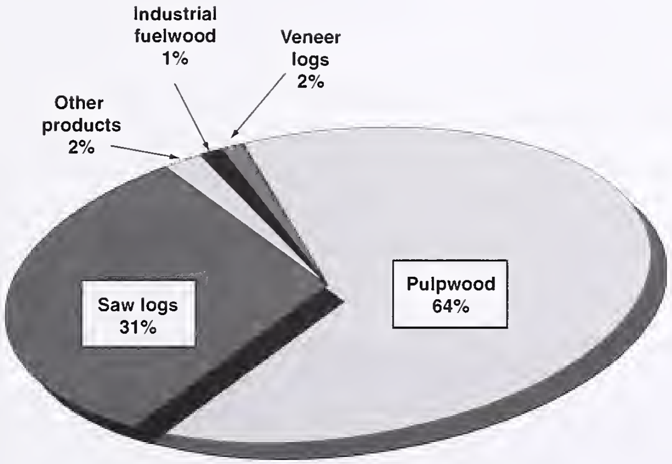


Figure 2.—*Distribution of industrial roundwood production by product, Wisconsin, 1996.*

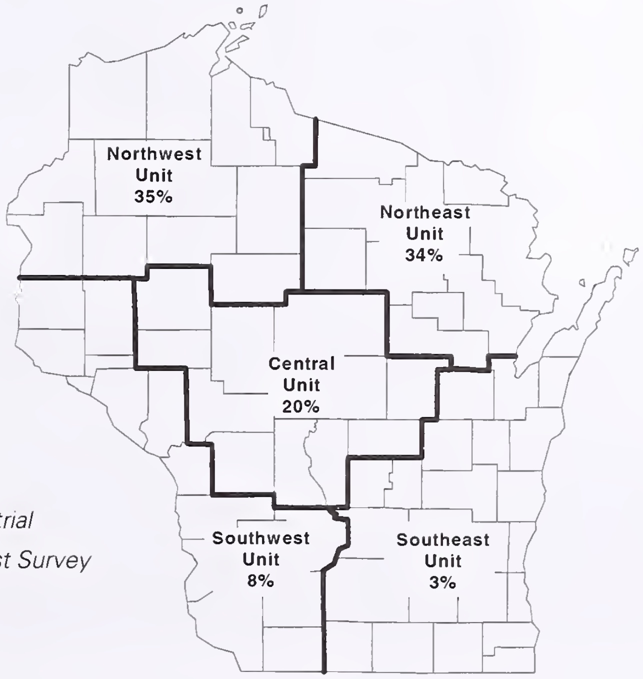


Figure 3.—*Distribution of industrial roundwood production by Forest Survey Unit, Wisconsin, 1996.*

PULPWOOD

- Wisconsin's pulpwood production (including both roundwood and mill residues generated by the State's other primary wood-using industries) stayed between 3.0 and 3.5 million cords from 1988 to 1996 (table 4).

- In 1996, pulpwood production in Wisconsin totaled just over 3.3 million cords, a 5-percent decrease from 1995. Much of the decrease was concentrated in aspen and other hardwoods.

- Roundwood supplied nearly 90 percent of the pulpwood produced in 1996, and aspen supplied a little over one-third of the roundwood (fig. 4). The remainder of the wood material used for pulp products came from mill residues.

- Wisconsin's pulpwood and particleboard mills consumed more than 91 percent of the State's production of pulpwood (table 5). The remainder was shipped out of State for processing, mainly to Michigan.

- Aspen and white birch were the major species exported for pulpwood, accounting for more than 46 percent of the volume exported. The combined volume of all the softwood species accounted for only 23 percent of the volume exported.

- The Northwest Unit provided more than 41 percent of the roundwood pulpwood harvested in the State in 1996 (table 6).

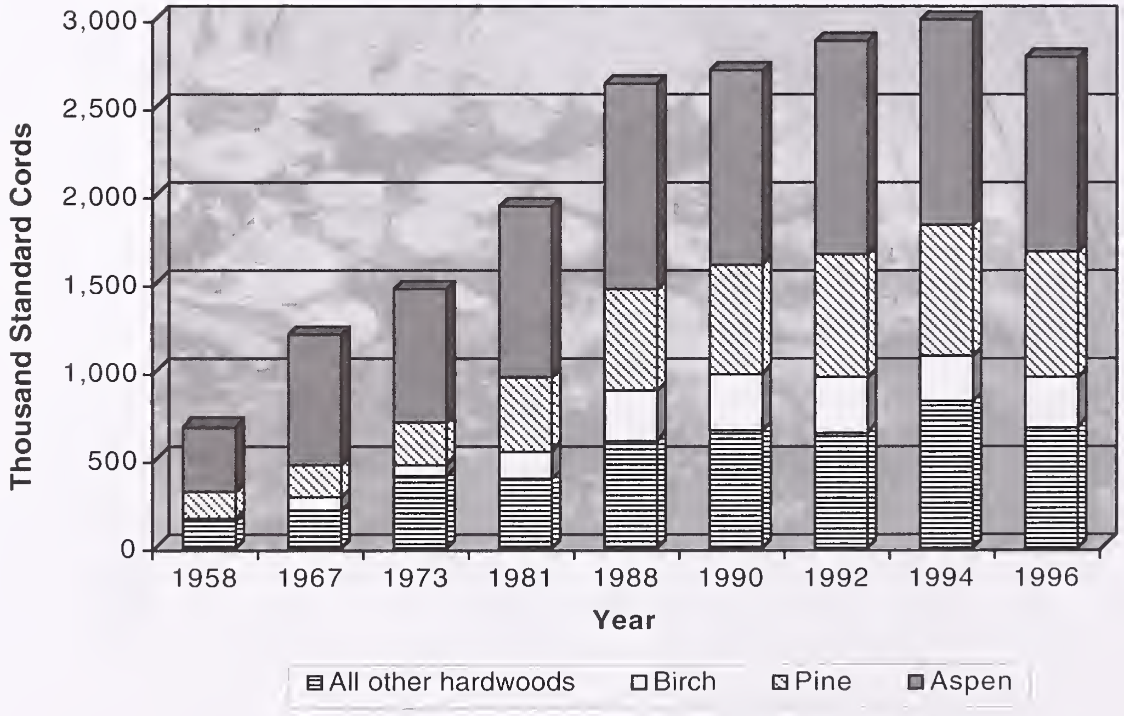


Figure 4.—*Pulpwood production from roundwood by species group and survey year, Wisconsin.*

- Two counties—Douglas and Bayfield—each reported more than 150 thousand cords of roundwood pulpwood harvested in 1996.

- Pulpwood receipts in 1996 totaled nearly 3.8 million cords, nearly the same as 1995 (table 7). Softwood roundwood and hardwood residue receipts increased, while hardwood roundwood and softwood residue receipts decreased.

- In 1996, roundwood pulpwood supplied nearly 88 percent of the pulpwood received; aspen and pine combined supplied 61 percent of the roundwood.

- Wisconsin supplied 80 percent of the pulpwood processed by its pulp and particleboard mills in 1996. The remainder was imported from other States and Canada. Minnesota supplied 47 percent of the pulpwood imported (table 8).

- Aspen, spruce, balsam fir, jack pine, and red pine were the main species imported to Wisconsin in 1996 (table 9). These five species accounted for 86 percent of the roundwood imported by Wisconsin pulp and particleboard mills in 1996.

SAW LOGS

- Loggers delivered nearly 634 million board feet of Wisconsin saw logs to mills in Wisconsin, Michigan, Minnesota, and other States in 1996, down by almost 2 percent (11 million board feet) from 1994 (table 10). Most of the decrease was associated with red and white oak, ash, black cherry, aspen, and elm.

- Saw log receipts also decreased by less than 1 percent. Most of the decrease was associated with aspen, white oak, ash, and black cherry.

- Wisconsin sawmills processed more than 93 percent of the State's production of saw logs (table 11, fig. 5). The remainder was exported to Minnesota, Michigan, Iowa, and Illinois.

Pulpwood is a major industrial product in Wisconsin. A yearly study is done of all pulp mills and particleboard mills in the North Central Region. Separate publications with the results of these studies are available from the North Central Research Station.

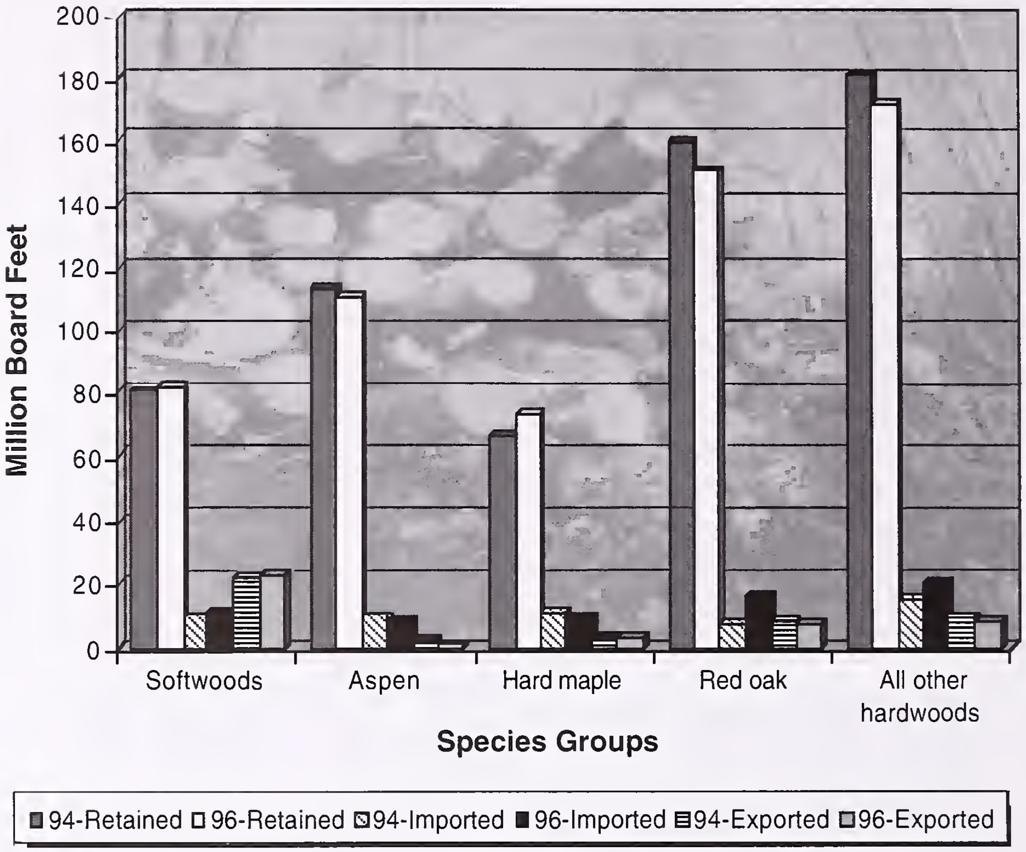


Figure 5.—*Saw log production retained, imported, and exported (mills outside Wisconsin) by species groups, Wisconsin, 1994 and 1996.*

- More than half of the saw logs exported from Wisconsin went to Minnesota. Michigan received a quarter of the saw logs exported from Wisconsin. Red pine, jack pine, and white pine accounted for nearly 99 percent of the saw logs shipped to Minnesota, while red oaks, hard maples, white birch, and aspen combined made up 76 percent of the saw logs sent to Michigan.

- The Northwest Unit of Wisconsin produced 85 percent of the saw log volume that was exported to Minnesota and Michigan. The Southwest Unit shipped nearly 10 million board feet of saw logs to Iowa and Illinois combined.

- The Northeast and Northwest Units together produced more than 56 percent of the State's saw logs (table 12).

- Major saw log producing counties with more than 20 million board feet each were Forest, Langlade, Marinette, and Menominee in the Northeast Unit and Bayfield, Rusk, and Sawyer in the Northwest Unit.

- Wisconsin supplied more than 90 percent of the saw log volume needed by its sawmills in 1996 (table 13). The remainder was imported, mainly from Michigan, Minnesota, Iowa, and Canada.

VENEER LOGS

- Between 1994 and 1996, the volume of veneer logs harvested in Wisconsin decreased by more than one-third or almost 19 million board feet. During the same time period, veneer log receipts decreased by almost 13 percent or more than 7 million board feet (table 14).

- Softwood veneer log production declined by 86 percent between 1994 and 1996 and hardwood veneer log production declined by 34 percent (table 15). Veneer log receipts at mills in Wisconsin declined by 11 percent for softwoods and by 13 percent for hardwoods between 1994 and 1996.

- The Northwest and Northeast Units supplied more than two-thirds of the total veneer log volume produced.

- In 1996, Wisconsin mills processed 91 percent of the veneer logs harvested in the State (table 16, fig. 6). Michigan received 81 percent of the veneer logs exported from Wisconsin in 1996.

- Hard maple accounted for 57 percent of the volume of veneer logs exported from Wisconsin.

- Wisconsin supplied 59 percent of the State's veneer log requirements in 1996 (table 17). Imports from Michigan

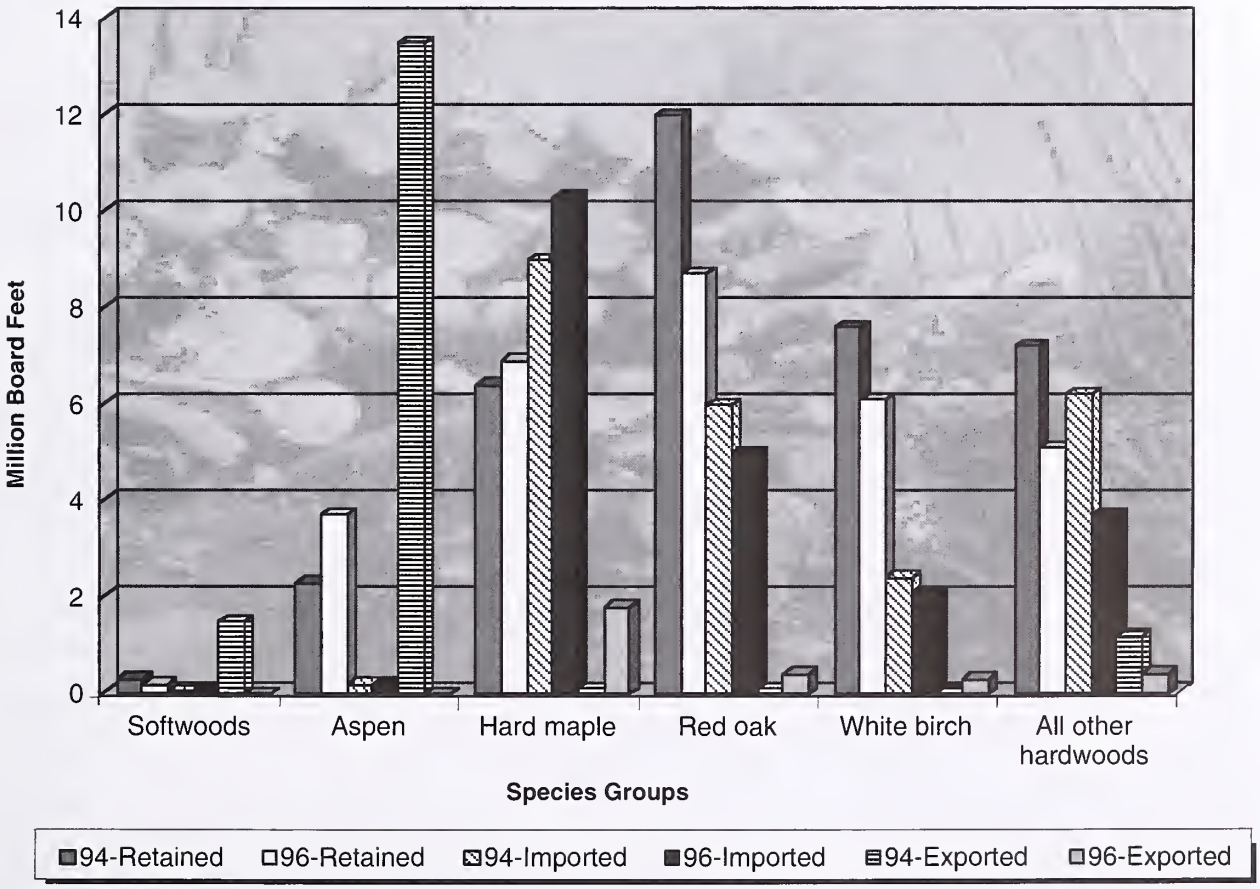


Figure 6.—*Veneer log production retained, imported, and exported (mills outside Wisconsin), by species groups, Wisconsin, 1994 and 1996.*

provided another 24 percent, and other States and Canada combined to provide the remaining 17 percent.

- Hard maple, red oak, and white birch made up 75 percent of the veneer log volume processed in the State in 1996. Almost 26 percent of these three species combined were imported from Michigan (table18).

OTHER PRODUCTS

- Industrial fuelwood from roundwood totaled more than 4.6 million cubic feet in 1996, near the same level as in 1994.

- All the industrial fuelwood production was from hardwood species, with aspen and red oak making up 99 percent of the total volume.

- The Northeast Unit produced the most industrial fuelwood in 1996, totaling 4 million cubic feet. The remaining 0.6 million cubic feet were harvested in the Northwest and Central Units.

- Cabin log production accounted for 663 thousand cubic feet of industrial roundwood in Wisconsin in 1996. More than 55 percent of cabin logs produced were red pine and 33 percent were white pine. The remaining 12 percent were northern white-cedar, hemlock, jack pine, balsam fir, and spruce.

- Northern white-cedar and red pine were the predominate species used in the production of posts and poles in Wisconsin in 1996.

- In 1996, nearly 4.1 million cubic feet of industrial roundwood was harvested in Wisconsin for a variety of specialty products, including excelsior/shavings bolts, cooperage, and other miscellaneous products.

TIMBER REMOVALS

- In the production of industrial roundwood in 1996, nearly 331 million cubic feet of Wisconsin's growing-stock inventory were removed from timberland, a 4-percent decrease from 1994 (table 19, fig. 7).

- More than 68 percent of the growing-stock removals came from the Northeast and Northwest Units, the region of the State where pulpwood production is concentrated (table 20).

- Aspen accounted for one-third of all growing-stock removals.

- Industrial roundwood harvesting also removed 1,007 million board feet of wood from the sawtimber portion of the growing-stock inventory in 1996 (table 21), a 4-percent decrease from 1994.

- Nearly 64 percent of all sawtimber removals occurred in the Northeast and Northwest Units.

- Sawtimber removals were concentrated in four species groups—aspen, red oak, hard maple, and red pine—which together made up more than two-thirds of all sawtimber removals. Aspen alone accounted for nearly one-third of all sawtimber removals.

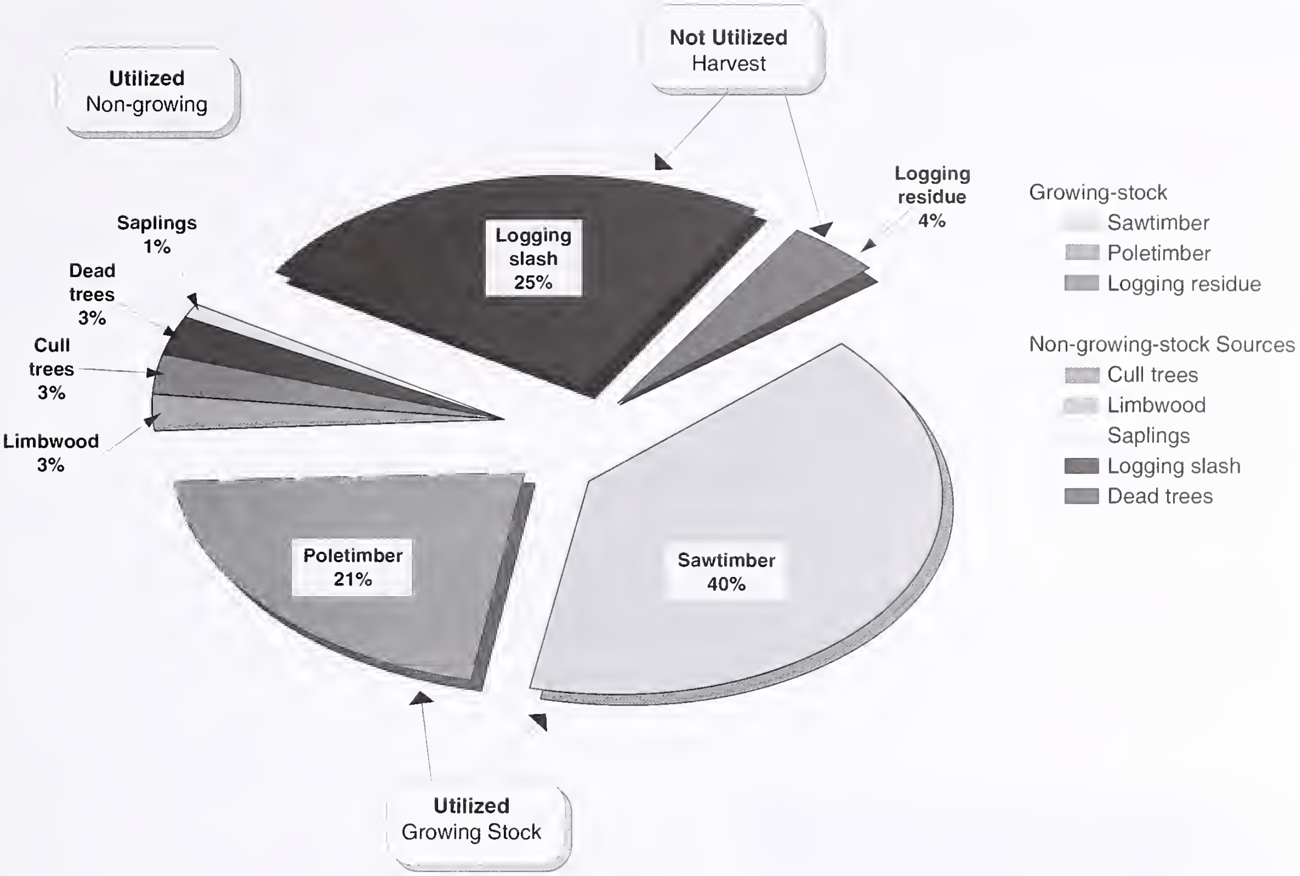


Figure 7.—*Distribution of timber removals for industrial roundwood by source of material, Wisconsin, 1996.*

HARVEST RESIDUES

- In 1996, harvesting of industrial roundwood products left nearly 148 million cubic feet of harvest residues on the ground (table 22)—a 6-percent decrease from 1994—generally due to the decrease in harvest of saw logs and pulpwood in 1996.

- More than two-thirds of the harvest residues were left in the Northeast and Northwest Units, and the Central Unit accounted for another 20 percent.

- Four species groups—aspen, red oak, hard maple, and jack pine—accounted for over 60 percent of the harvest residues.

Residential fuelwood is a major nonindustrial product in Wisconsin. The results of a residential fuelwood study conducted in 1994 are available in Residential Fuelwood Consumption and Production in Wisconsin, 1994, RB-NC-172, by Dennis M. May and Terry Mace.

PRIMARY MILL RESIDUES

- In converting industrial roundwood into milled products such as lumber, sheathing, and wood pulp, Wisconsin's primary wood-using industry generated just under 3.1 million green tons of wood and bark residues (table 23).

- Bark residues made up 41 percent of the residue produced at primary wood-using mills, followed by coarse residues at 32 percent and fine residues with the remaining 27 percent (fig. 8).

- Of the residues generated by Wisconsin mills in 1996, 54 percent were used for industrial fuel and 23 percent were used for fiber products such as pulp and particleboard. Only 2 percent of mill residues were not used (fig. 9).

- In general, most coarse wood residues were used for fiber products, most fine residues were used for either fuel or other products such as mulch and litter, and most bark was burned as fuel or used as mulch.

- More than 60 percent of the mill residues were generated in the Central and Northeast Units, and more than 70 percent of all unused mill residues were located in the Central and Northwest Units.

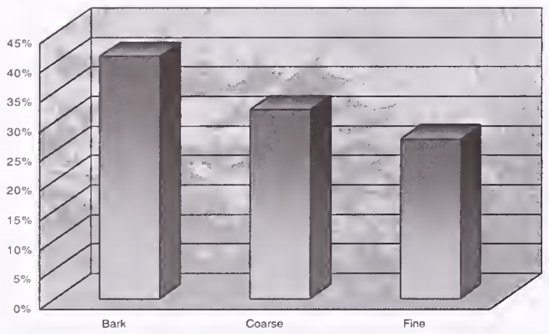


Figure 8.—*Distribution of residues generated by primary wood-using mills by type of residue, Wisconsin, 1996.*

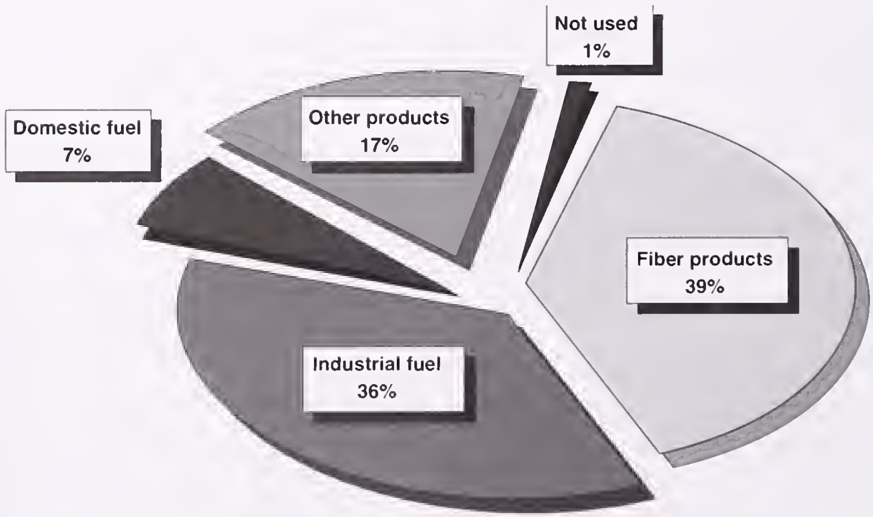


Figure 9.—*Distribution of residues generated by primary wood-using mills by method of disposal, Wisconsin, 1996.*

REGIONAL TRENDS

Northeast Unit

- In 1996, 121 million cubic feet of roundwood were produced in the 10 counties that make up the Northeast Unit of Wisconsin and accounted for more than one-third of the State's total output.

- The 121 million cubic feet of industrial roundwood produced reflects a decline of more than 2 percent between 1994 and 1996. Softwood output increased by 7 percent in this Unit and hardwood output decreased by nearly 5 percent.

- Pulpwood production, which accounts for nearly two-thirds of the Unit's total roundwood output, declined by 6 percent.

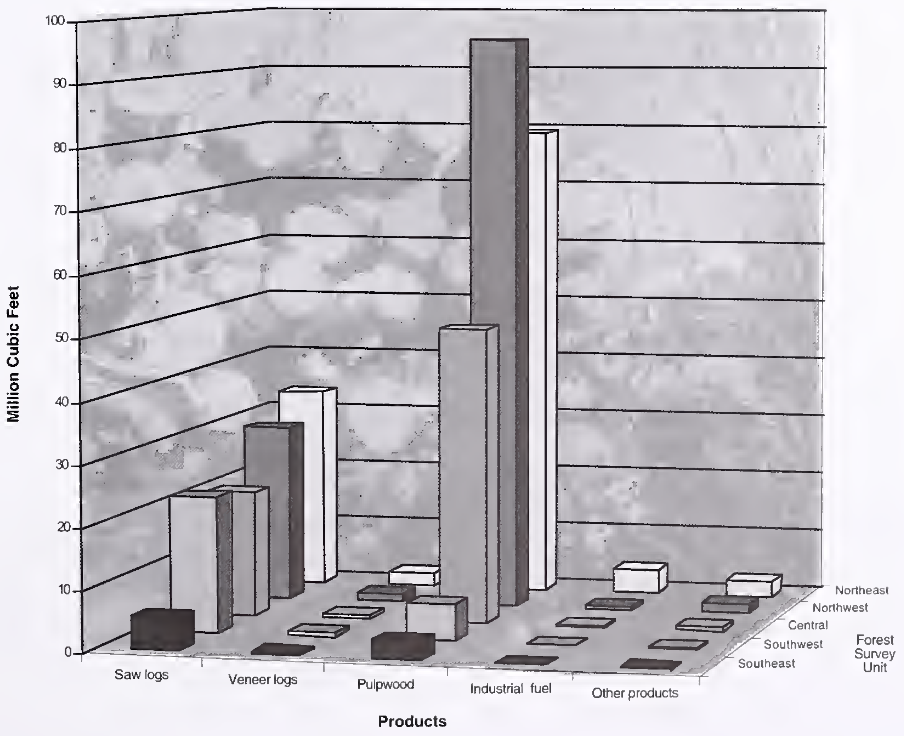
- Saw log production of nearly 192 million board feet accounted for more than one-fourth of the total roundwood production in this Unit, an increase of 5 percent from 1994.

- The Northeast Unit produced 30 percent of the State's saw logs, 40 percent of the veneer logs, 34 percent of the pulpwood, 86 percent of the industrial fuelwood, and 46 percent of the roundwood used for other industrial roundwood products (fig. 10).

- In 1996, the Northeast Unit had 85 sawmills (including mills that sawed less than 50 thousand board feet annually), 4 veneer mills, 3 pulp mills, 2 particleboard mills, and 11 other miscellaneous mills.

- Nearly 55 percent of the sawmills in this Unit had receipts of less than 1 million board feet; 8 percent of the sawmills had receipts of more than 10 million board feet.

Figure 10.—*Industrial roundwood production by product and Forest Survey Unit, Wisconsin, 1996.*



Northwest Unit

- The Northwest Unit remained the leading supplier of industrial roundwood in the State in 1996, producing 128 million cubic feet of industrial roundwood.

- This Unit had the second largest decrease —7 percent—in industrial roundwood production between 1994 and 1996.

- Roundwood harvested for pulp and particleboard production accounted for nearly three-quarters of the total roundwood produced in this Unit. The Northwest Unit supplied 40 percent of the State's roundwood produced for pulp and particleboard mills in 1996.

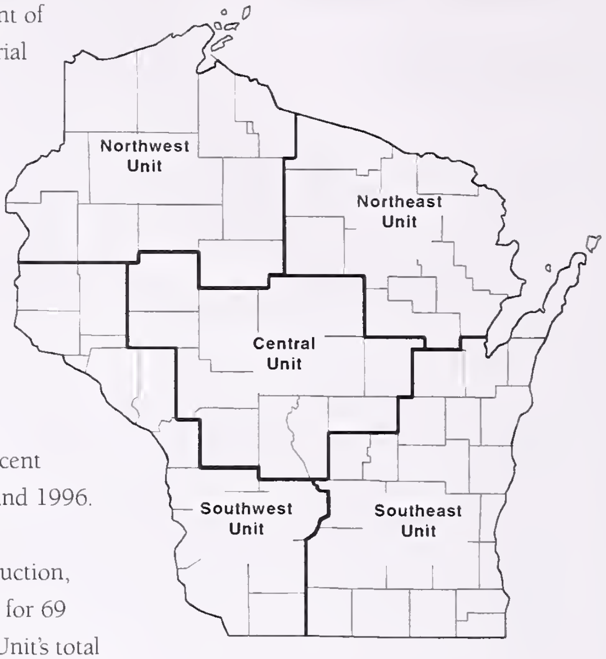
- Industrial roundwood production for saw logs increased from 164 million board feet in 1994 to 166 million board feet in 1996. The Northwest Unit was second behind the Northeast Unit in the production of industrial roundwood for saw logs in 1996.

- The Northwest Unit produced 26 percent of the State's saw logs, 27 percent of the veneer logs, 41 percent of the pulpwood, 12 percent of the industrial fuelwood, and 27 percent of the roundwood used for other industrial roundwood products.

- In 1996, the Northwest Unit had 66 sawmills (including mills that sawed less than 50 thousand board feet annually), 5 veneer mills, 3 pulp mills, 1 particleboard mill, and 9 other miscellaneous mills.

Central Unit

- The Central Unit produced the third largest amount of industrial roundwood in Wisconsin, supplying nearly 20 percent of the total industrial roundwood produced. In 1996, this Unit produced nearly 71 million cubic feet of industrial roundwood, a decline of 8 percent between 1994 and 1996.



- Pulpwood production, which accounts for 69 percent of this Unit's total roundwood output, declined by almost 4 percent.

- Saw log production declined by 15 percent, from 24 million cubic feet in 1994 to 21 million cubic feet in 1996. Softwood saw log production increased by 37 percent while hardwood saw log production decreased by more than 20 percent.

- The Central Unit produced 19 percent of the State's saw logs, 12 percent of the veneer logs, 21 percent of the pulpwood, 36 percent of the cabin logs, and 4 percent of the roundwood used for other industrial roundwood products.

- In 1996, the Central Unit had 83 sawmills (including mills that sawed less than 50 thousand board feet annually), 3 veneer mills, 9 pulp mills, 1 particleboard mill, and 2 other miscellaneous mills.

- More than 61 percent of the sawmills in this Unit had receipts of less than 1 million board feet; 31 percent of the sawmills had roundwood receipts between 1 and 5 million board feet.

Southwest Unit

- In 1996, 30 million cubic feet of industrial roundwood were produced in the 14 counties that make up the Southwest Unit of Wisconsin, accounting for 8 percent of the State's total output.

- Industrial roundwood production in this Unit fell by less than 1 percent between surveys, declining by only 111 thousand cubic feet between 1994 and 1996.

- The Southwest Unit produced the largest volume of roundwood used for cooperage and was the second largest producer of posts in the State in 1996.

- The production of saw logs accounted for 75 percent of the total industrial roundwood produced in 1996 in this Unit, followed by pulpwood at 20 percent.

- In 1996, the Southwest Unit had 67 sawmills; of those, 31 processed between 1 and 5 million board feet and 5 processed more than 5 million board feet. There were also four miscellaneous product mills in this Unit.

Southeast Unit

- The Southeast Unit produced the least amount of industrial roundwood in Wisconsin, contributing less then 3 percent of the total industrial roundwood produced in 1996.

- While all other Units had a decrease in industrial roundwood production between 1994 and 1996, production in the Southeast Unit increased by 10 percent.

- Saw logs accounted for 59 percent of the industrial roundwood produced in this Unit in 1996, followed by pulpwood at 35 percent.

- In 1996, the Southeast Unit had 54 sawmills, 3 veneer mills, 3 pulpmills, and 3 miscellaneous mills. Only seven of the sawmills processed more than 1 million board feet of roundwood.

APPENDIX

STUDY METHODS

This study was a cooperative effort of the Wisconsin Department of Natural Resources (WiDNR) and the North Central Research Station (NCRS). Using mail questionnaires supplied by NCRS and designed to determine the size and composition of Wisconsin's primary wood-using industry, its use of roundwood, and its generation and disposition of wood residues, the WiDNR canvassed all primary wood-using mills within the State. The WiDNR then followed up with non-responding mills through additional mailings, telephone calls, and personal contacts until it achieved a 100 percent response. Completed questionnaires were sent to NCRS for editing and processing.

As part of data editing and processing, all industrial roundwood volumes reported on the questionnaires were converted to standard units of measure using regional conversion factors. Timber removals by source of material and harvest residues generated during logging were estimated from standard product volumes using factors developed from logging utilization studies previously conducted by NCRS. Finalized data on Wisconsin's industrial roundwood receipts were loaded into a regional timber removals database and supplemented with data on out-of-State uses of Wisconsin's roundwood to provide a complete assessment of Wisconsin's timber product output.

DEFINITION OF TERMS

Board foot

Unit of measure applied to roundwood. It relates to lumber that is 1 foot long, 1 foot wide, and 1 inch thick (or its equivalent).

Bolt

A short log no more than 8 feet long, to be sawn for lumber, peeled or sliced for veneer, shaved for excelsior, or converted into shingles, cooperage stock, dimension stock, blocks, blanks, etc.

Central stem

The portion of a tree between a 1-foot stump and the minimum 4.0-inch top diameter outside bark or thepoint where the central stem breaks into limbs.

Coarse mill residue

Wood residue suitable for chipping such as slabs, edgings, and veneer cores.

Commercial species

Tree species presently or prospectively suitable for industrial wood products. (Note: Excludes species of typically small size, poor form, or inferior quality such as hophornbeam, Osage-orange, and redbud.)

Cull removals

Net volume of rough and rotten trees, plus the net volume in sections of the central stem of growing-stock trees that do not meet regional merchantability standards, harvested for industrial roundwood products.

Dead removals

Net volume of dead trees harvested for industrial roundwood products.

Diameter at breast height (d.b.h.)

The outside bark diameter at 4.5 feet above the forest floor on the uphill side of the tree. For determining breast height, the forest floor includes the duff layer that may be present, but does not include unincorporated woody debris that may rise above the ground line.

Fine mill residue

Wood residue not suitable for chipping such as sawdust and veneer clippings.

Forest land

Land at least 10 percent stocked by forest trees of any size, or formerly having had such tree cover, and not currently developed for nonforest use. (Note: Stocking is measured by comparing specified standards with basal area and /or number of trees, age or size, and spacing.) The minimum area for classification of forest land is 1 acre. Roadside, streamside, and shelterbelt strips of timber must have a crown width of at least 120 feet to qualify as forest land. Unimproved roads and trails, streams or other bodies of water, or clearings in forest areas shall be classed as forest if less than 120 feet wide.

Growing-stock removals

The growing-stock volume removed from the timberland inventory by harvesting industrial roundwood products. (Note: Includes sawtimber removals, poletimber removals, and logging residues.)

Growing-stock tree

A live timberland tree of commercial species that meets specified standards of size, quality, and merchantability. (Note: Excludes rough, rotten, and dead trees.)

Growing-stock volume

Net volume of growing-stock trees 5.0 inches d.b.h. and over, from 1 foot above the ground to a minimum 4.0-inch top diameter outside bark of the central stem or to the point where the central stem breaks into limbs.

Hardwoods

Dicotyledonous trees, usually broad-leaved and deciduous.

Harvest residues

Total net volume of unused portions of trees cut or killed by logging. (Note: Includes both logging residues and logging slash.)

Industrial fuelwood

A roundwood product, with or without bark, used to generate energy at manufacturing facilities and schools, correctional institutions, or electric generating plants.

Industrial roundwood exports

The quantity of industrial roundwood harvested in a geographical area and transported to other geographical areas.

Industrial roundwood imports

The quantity of industrial roundwood received from other geographical areas.

Industrial roundwood products

Saw logs, pulpwood, veneer logs, poles, commercial posts, pilings, cooperage logs, particleboard bolts, shaving bolts, lath bolts, charcoal bolts, and chips from roundwood used for pulp or board products.

Industrial roundwood production

The quantity of industrial roundwood harvested in a geographic area plus all industrial roundwood exported to other geographical areas.

Industrial roundwood receipts

The quantity of industrial roundwood received by commercial mills in a geographic area plus all industrial roundwood imported from other geographical areas.

Industrial roundwood retained

The quantity of industrial roundwood harvested from and processed by commercial mills within the same geographical area.

International 1/4-inch rule

A log rule or formula for estimating the board foot volume of logs, allowing 1/2 inch of taper for each 4-foot length. The rule appears in a number of forms that allow for kerf. In this form, 1/4 inch of kerf is assumed. This rule is used as the USDA Forest Service standard log rule in the Eastern United States.

Limbwood removals

Net volume of all portions of a tree other than the central stem (including forks, large limbs, tops, and stumps) harvested for industrial roundwood products.

Logging residue

Net volume of unused portions of the merchantable central stem of growing-stock trees cut or killed by logging.

Logging slash

Net volume of unused portions of the unmerchantable (non-growing stock) sections of trees cut or killed by logging.

Merchantable sections

Sections of the central stem of growing-stock trees that meet either pulpwood or saw log specifications.

Net volume

Gross volume less deductions for rot, sweep, or other defects affecting use for roundwood products.

Noncommercial species

Tree species of typically small size, poor form, or inferior quality that normally do not develop into trees suitable for industrial roundwood products. Classified in volume tables as rough trees.

Nonforest land

Land that has never supported forests, and land formerly forested where use for timber management is precluded by development for other uses. (Note: Includes areas used for crops, active Christmas tree plantations, orchards, nurseries, improved pasture, residential areas, city parks, improved roads of any width and adjoining clearings, powerline clearings of any width, and 1- to 39.9-acre areas of water classified by the Bureau of the Census as land.) If intermingled in forest areas, unimproved roads and nonforest strips must be more than 120 feet wide and more than 1 acre to qualify as nonforest land.

Nonforest land removals

Net volume of trees on nonforest lands harvested for industrial roundwood products.

Poletimber

A growing-stock tree at least 5.0 inches d.b.h. but smaller than sawtimber size (9.0 inches d.b.h. for softwoods, 11.0 inches d.b.h. for hardwoods).

Poletimber removals

Net volume in the merchantable central stem of poletimber trees harvested for industrial roundwood products.

Primary wood-using mills

Mills receiving roundwood or chips from roundwood for processing into products such as lumber, veneer, and pulp.

Primary wood-using mill residue

Wood materials (coarse and fine) and bark generated at manufacturing plants that process industrial roundwood into principal products. These residues include wood products (byproducts) obtained incidental to production of principal products and wood materials not utilized for some product.

Rotten tree

A tree that does not meet regional merchantability standards because of excessive unsound cull.

Rough tree

A tree that does not meet regional merchantability standards because of excessive sound cull. Includes noncommercial tree species.

Roundwood

Logs, bolts, or other round sections cut from trees (including chips from roundwood).

Sapling

A live tree between 1.0 and 5.0 inches d.b.h.

Sapling removals

Net volume in saplings harvested for industrial roundwood products.

Saw log portion

That portion of the central stem of sawtimber trees between the stump and the saw log top.

Saw log top

The point on the central stem of sawtimber trees above which a saw log cannot be produced. The minimum saw log top is 7.0 inches diameter outside bark for softwoods and 9.0 inches diameter outside bark for hardwoods.

Sawtimber removals

As used in table 19, sawtimber removals refers to the net volume in the merchantable central stem of sawtimber trees harvested for industrial roundwood products. (Note: Includes the saw log and upper stem portions of sawtimber trees.) When referring to the sawtimber volume removed from the timberland inventory as in table 21, sawtimber removals refers to the net volume in the saw log portion of sawtimber trees harvested for roundwood products or left on the ground as harvest residue, and is usually expressed in thousands of board feet (International 1/4-inch rule).

Sawtimber tree

A growing-stock tree containing at least a 12-foot saw log or two noncontiguous saw logs 8 feet or longer and meeting regional specifications for freedom from defect. Softwoods must be at least 9.0 inches d.b.h. and hardwoods must be at least 11.0 inches d.b.h.

Sawtimber volume

Net volume in the saw log portion of sawtimber trees.

Softwoods

Coniferous trees, usually evergreen, having needles or scale-like leaves.

Timber product output

The volume of roundwood products produced from an area's forests.

Timberland

Forest land that is producing, or is capable of producing, in excess of 20 cubic feet per acre per year of industrial roundwood products under natural conditions, is not withdrawn from timber utilization by statute or administrative regulation, and is not associated with urban or rural development.

Tree

A woody plant usually having one or more perennial stems, a more or less definitely formed crown of foliage, and a height of at least 12 feet at maturity.

Upper stem portion

That portion of the central stem of sawtimber trees between the saw log top and the minimum top diameter of 4.0 inches outside bark, or to the point where the central stem breaks into limbs.

Veneer log

A log or bolt used in the production of plywood, finished panels, containers, or veneer sheets, both rotary cut and sliced.

COMMON AND SCIENTIFIC NAMES OF TREE SPECIES MENTIONED IN THIS REPORT

SOFTWOODS

Pine

- Jack pine .... *Pinus banksiana*
- Red pine .... *Pinus resinosa*
- Eastern white pine .... *Pinus strobus*

Spruce

- White spruce .... *Picea glauca*
- Black spruce .... *Picea mariana*

Balsam fir .... *Abies balsamea*

Eastern hemlock .... *Tsuga canadensis*

Tamarack .... *Larix laricina*

Northern white-cedar .... *Thuja occidentalis*

Eastern redcedar .... *Juniperis virginiana*

HARDWOODS

White oak

- White oak .... *Quercus alba*
- Bur oak .... *Quercus macrocarpa*
- Chinkapin oak .... *Quercus muehlenbergii*
- Swamp white oak .... *Quercus bicolor*

Red oak

- Northern red oak .... *Quercus rubra*
- Black oak .... *Quercus velutina*
- Northern pin oak .... *Quercus ellipsoidalis*

Hickory

- Bitternut hickory .... *Carya cordiformis*
- Pignut hickory .... *Carya glabra*
- Shagbark hickory .... *Carya ovata*

Birch

- White birch .... *Betula papyrifera*
- Yellow birch .... *Betula alleghaniensis*

Hard maple	
Black maple	*Acer nigrum*
Sugar maple	*Acer saccharum*
Soft maple	
Red maple	*Acer rubrum*
Silver maple	*Acer saccharinum*
American beech	*Fagus grandifolia*
Ash	
Black ash	*Fraxinus nigra*
White ash	*Fraxinus americana*
Green ash	*Fraxinus pennsylvanica*
Balsam poplar	*Populus balsamifera*
Aspen	
Bigtooth aspen	*Populus grandidentata*
Quaking aspen	*Populus tremuloides*
Eastern cottonwood	*Populus deltoides*
American basswood	*Tilia americana*
Black walnut	*Juglans nigra*
Elm	
American elm	*Ulmus americana*
Rock elm	*Ulmus thomasii*
Slippery elm	*Ulmus rubra*
Other hardwoods	
Northern catalpa	*Catalpa speciosa*
Black cherry	*Prunus serotina*
River birch	*Betula nigra*
Black locust	*Robinia pseudoacacia*
Honeylocust	*Gleditsia triacanthos*
Red mulberry	*Morus rubra*
Butternut	*Juglans cinerea*
Black willow	*Salix nigra*
Boxelder	*Acer negundo*
Hackberry	*Celtis occidentalis*

TABLE TITLES

Table 1.—*Number of active primary wood-using mills by mill type in Wisconsin, 1981, 1986, 1988, 1990, 1992, 1994, 1996*

Table 2.—*Industrial roundwood receipts by mill type in Wisconsin, 1981, 1986, 1988, 1990, 1992, 1994, 1996*

Table 3.—*Industrial roundwood production by Forest Survey Unit, species group, and type of product, Wisconsin, 1996*

Table 4.—*Pulpwood production by year, product form, and species group, Wisconsin, 1946-1996*

Table 5.—*Pulpwood production by product form, species group, and destination, Wisconsin, 1996*

Table 6.—*Pulpwood production from roundwood by Forest Survey Unit, county, and species group, Wisconsin, 1996*

Table 7.—*Pulpwood receipts by year, product form, and species group, Wisconsin, 1946-1996*

Table 8.—*Pulpwood receipts by year and area of origin, Wisconsin, 1960-1996*

Table 9.—*Pulpwood receipts by product form, species group, and area of origin, Wisconsin, 1996*

Table 10.—*Saw log production and receipts by species group, Wisconsin, 1994 and 1996*

Table 11.—*Saw log production by Forest Survey Unit, species group, and destination, Wisconsin, 1996*

Table 12.—*Saw log production by Forest Survey Unit, county, and species group, Wisconsin, 1996*

Table 13.—*Saw log receipts by Forest Survey Unit, species group, and State of origin, Wisconsin, 1996*

Table 14.—*Veneer log and bolt production and receipts, Wisconsin, 1946-1996*

Table 15.—*Veneer log and bolt production and receipts by species group, Wisconsin, 1994 and 1996*

Table 16.—*Veneer log and bolt production by species group and destination, Wisconsin, 1996*

Table 17.—*Veneer log and bolt receipts by area of origin, Wisconsin, 1946-1996*

Table 18.—*Veneer log and bolt receipts by species group and area of origin, Wisconsin, 1996*

Table 19.—*Wood material harvested for industrial roundwood by Forest Survey Unit, species group, and source of material, Wisconsin, 1996*

Table 20.—*Growing-stock removals from timberland for industrial roundwood by Forest Survey Unit, county, and species group, Wisconsin, 1996*

Table 21.—*Sawtimber removals from timberland for industrial roundwood by Forest Survey Unit, county, and species group, Wisconsin, 1996*

Table 22.—*Harvest residues generated by industrial roundwood harvesting by Forest Survey Unit, county, and species group, Wisconsin, 1996*

Table 23.—*Residue produced at primary wood-using mills by Forest Survey Unit, type of use, and residue type, Wisconsin, 1996*

TABLES

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Table 1.--*Number of active primary wood-using mills by mill type in Wisconsin, 1981, 1986, 1988, 1990, 1992, 1994, 1996*

Mill type	1981	1986	1988	1990	1992	1994	1996
Sawmills [1]							
Large [2]	23	21	32	27	33	39	34
Medium [3]	110	103	92	102	106	111	106
Small [4]	140	142	131	139	114	118	115
Total	273	266	255	268	253	268	255
Pulp mills [5]	23	21	22	22	21	21	22
Veneer mills	15	15	17	17	12	12	15
Other mills [6]	12	15	15	16	25	29	30
Total	323	317	309	323	311	330	322

1 *Mills persistently sawing 50 thousand board feet or more annually. (100 mills sawed under 50 thousand board feet per year.)*

2 *Annual lumber production in excess of 5 million board feet.*

3 *Annual lumber production from 1 million to 5 million board feet.*

4 *Annual lumber production from 50 thousand to 1 million board feet.*

5 *Includes particleboard plants, i.e., oriented strandboard, waferboard, etc.*

6 *Includes specialty mills, i.e., excelsior/shavings, posts and poles, cabin logs, etc.*

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Table 2.--*Industrial roundwood receipts by mill type in Wisconsin, 1981, 1986, 1988, 1990, 1992, 1994, 1996*

(In million cubic feet)

Mill type	1981	1986	1988	1990	1992	1994	1996
ALL SPECIES							
Pulp mills [1]	208.7	224.0	226.1	235.7	248.1	261.4	260.6
Sawmills	94.4	93.2	93.4	97.8	105.7	117.4	111.3
Other mills [2]	6.6	9.7	9.2	14.0	15.4	17.2	21.9
Total	309.7	326.9	328.7	347.5	369.2	396.0	393.8
SOFTWOODS							
Pulp mills [1]	62.7	55.9	67.2	72.9	76.5	83.0	92.5
Sawmills	15.8	11.3	13.2	13.8	13.8	16.1	16.0
Other mills [2]	0.2	0.4	0.1	2.3	0.5	1.1	1.7
Total	78.7	67.6	80.5	89.0	90.8	100.2	110.2
HARDWOODS							
Pulp mills [1]	146.0	168.1	158.9	162.8	171.6	178.4	168.1
Sawmills	78.6	81.9	80.2	84.0	91.9	101.3	95.3
Other mills [2]	6.4	9.3	9.1	11.7	14.8	16.1	20.2
Total	231.0	259.3	248.2	258.5	278.3	295.8	283.6

[1] *Includes particleboard plants, i.e., oriented strandboard, waferboard, etc.*

[2] *Includes veneer mills, excelsior/shavings mills, post and pole mills, cabin log mills, etc. Does not include treating plants or fuelwood receipts.*

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Table 3.--*Industrial roundwood production by Forest Survey Unit, species group, and type of product, Wisconsin, 1996* [1]

ALL UNITS

Species group	Saw logs		Veneer logs		Pulpwood		Cabin logs	Cooperage		Industrial fuelwood		Poles		Posts		Other products	All products
	MBF [2]	MCF [3]	MBF [2]	MCF [3]	Cords [4]	MCF [3]	MCF [3]	MBF [2]	MCF [3]	Cords [4]	MCF [3]	Pieces	MCF [3]	M pieces	MCF [3]	MCF [3]	MCF [3]
Softwoods																	
Balsam fir	1,024	215	--	--	92,028	7,252	2	--	--	--	--	--	--	9	10	*	7,479
Eastern redcedar	27	6	--	--	--	--	--	--	--	--	--	--	--	--	--	--	6
Tamarack	96	20	--	--	10,197	804	--	--	--	--	--	--	--	--	--	*	824
Spruce	1,479	310	--	--	36,623	2,886	2	--	--	--	--	--	--	--	--	*	3,198
Jack pine	15,928	3,343	3	1	352,170	27,786	1	--	--	--	--	--	--	--	--	--	31,131
Red pine	50,531	8,600	79	13	316,296	24,987	368	--	--	--	--	3,122	19	306	315	26	34,329
White pine	31,180	5,307	163	27	43,419	3,430	220	--	--	--	--	--	--	--	--	5	8,988
N. white-cedar	1,564	328	8	1	427	34	70	--	--	--	--	--	--	383	394	1	828
Hemlock	4,023	685	--	--	25,184	1,990	1	--	--	--	--	--	--	--	--	*	2,676
Total	105,853	18,815	253	41	876,345	69,169	663	--	--	--	--	3,122	19	699	718	33	89,458
Hardwoods																	
Soft maple	40,208	7,177	685	112	167,141	13,220	--	--	--	188	13	--	--	--	--	82	20,604
Hard maple	76,843	12,840	8,722	1,420	212,019	16,749	--	--	--	152	11	--	--	--	--	--	31,021
White birch	20,674	3,690	6,326	1,030	249,747	19,754	--	--	--	17	1	--	--	--	--	19	24,494
Yellow birch	4,315	770	533	87	25,302	1,999	--	--	--	--	--	--	--	--	--	--	2,856
Hickory	3,716	663	13	2	643	51	--	--	--	--	--	--	--	--	--	--	716
Hackberry	268	48	--	--	--	--	--	--	--	--	--	--	--	--	--	--	48
Beech	1,284	229	46	7	976	77	--	--	--	--	--	--	--	--	--	--	314
Ash	15,738	2,809	272	44	76,641	6,055	--	--	--	57	4	--	--	--	--	--	8,912
Butternut	382	68	--	--	--	--	--	--	--	--	--	--	--	--	--	--	68
Black walnut	1,125	201	28	5	--	--	--	--	--	--	--	--	--	--	--	--	205
Cottonwood	1,729	309	16	3	1,086	86	--	--	--	--	--	--	--	--	--	33	430
Balsam poplar	648	116	17	3	6,358	502	--	--	--	--	--	--	--	--	--	--	621
Aspen	112,645	19,668	3,732	607	1,109,221	87,628	--	--	--	50,589	3,541	--	--	--	--	3,626	115,071
Black cherry	2,087	373	351	57	85	7	--	--	--	4	*	--	--	--	--	--	437
Red oak	157,561	27,589	9,044	1,472	109,239	8,640	--	86	12	15,221	1,065	--	--	--	--	8	38,786
White oak	44,114	7,724	2,272	370	25,130	1,988	--	416	57	114	8	--	--	1	1	12	10,160
Willow	118	21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	21
Basswood	41,808	7,463	1,288	210	50,800	4,013	--	10	1	--	--	--	--	--	--	273	11,960
Elm	2,664	476	10	2	26,627	2,104	--	--	--	--	--	--	--	--	--	--	2,581
Other hardwoods	2	*	--	--	8,050	636	--	--	--	--	--	--	--	--	--	--	636
Total	527,931	92,235	33,355	5,430	2,069,064	163,508	--	512	71	66,341	4,644	--	--	1	1	4,053	269,942
All species	633,784	111,050	33,609	5,471	2,945,409	232,677	663	512	71	66,341	4,644	3,122	19	700	719	4,086	359,400

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NORTHEAST UNIT

Species	Saw logs		Veneer logs		Pulpwood		Cabin logs	Cooperage		Industrial fuelwood		Poles		Posts		Other products	All products
	MBF[2]	MCF[3]	MBF[2]	MCF[3]	Cords[4]	MCF[3]	MCF[3]	MBF[2]	MCF[3]	Cords[4]	MCF[3]	Pieces	MCF[3]	M pieces	MCF[3]	MCF[3]	MCF[3]
Softwoods																	
Balsam fir	689	145	--	--	40,852	3,219	2	--	--	--	--	--	--	9	10	*	3,375
Tamarack	50	11	--	--	4,930	389	--	--	--	--	--	--	--	--	--	*	399
Spruce	726	152	--	--	15,646	1,233	2	--	--	--	--	--	--	--	--	*	1,387
Jack pine	3,519	739	2	*	72,364	5,710	*	--	--	--	--	--	--	--	--	--	6,449
Red pine	15,786	2,687	53	9	75,258	5,945	168	--	--	--	--	900	5	--	--	*	8,815
White pine	7,832	1,333	106	17	9,908	783	122	--	--	--	--	--	--	--	--	*	2,255
N. white-cedar	927	195	8	1	423	33	48	--	--	--	--	--	--	347	356	*	634
Hemlock	3,729	635	--	--	20,798	1,643	1	--	--	--	--	--	--	--	--	*	2,279
Total	33,256	5,895	168	27	240,179	18,955	344	--	--	--	--	900	5	356	366	1	25,594
Hardwoods																	
Soft maple	9,323	1,664	283	46	65,460	5,178	--	--	--	--	--	--	--	--	--	--	6,888
Hard maple	34,737	5,805	5,070	825	86,706	6,850	--	--	--	--	--	--	--	--	--	--	13,480
White birch	10,413	1,859	4,101	668	103,597	8,194	--	--	--	--	--	--	--	--	--	--	10,720
Yellow birch	2,333	416	288	47	16,329	1,290	--	--	--	--	--	--	--	--	--	--	1,753
Hickory	217	39	2	*	--	--	--	--	--	--	--	--	--	--	--	--	39
Beech	806	144	25	4	635	50	--	--	--	--	--	--	--	--	--	--	198
Ash	3,979	710	8	1	32,889	2,598	--	--	--	--	--	--	--	--	--	--	3,310
Butternut	66	12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	12
Black walnut	--	--	19	3	--	--	--	--	--	--	--	--	--	--	--	--	3
Cottonwood	73	13	--	--	443	35	--	--	--	--	--	--	--	--	--	--	48
Balsam poplar	571	102	--	--	5,001	395	--	--	--	--	--	--	--	--	--	--	497
Aspen	55,153	9,630	691	112	366,803	28,977	--	--	--	42,857	3,000	--	--	--	--	1,583	43,303
Black cherry	264	47	141	23	83	7	--	--	--	--	--	--	--	--	--	--	77
Red oak	20,373	3,567	2,439	397	30,249	2,392	--	--	--	14,286	1,000	--	--	--	--	--	7,356
White oak	3,889	681	104	17	4,877	386	--	--	--	--	--	--	--	--	--	--	1,084
Basswood	16,149	2,883	173	28	30,958	2,446	--	--	--	--	--	--	--	--	--	265	5,621
Elm	213	38	--	--	14,684	1,160	--	--	--	--	--	--	--	--	--	--	1,198
Other hardwoods	--	--	--	--	3,921	310	--	--	--	--	--	--	--	--	--	--	310
Total	158,559	27,609	13,343	2,172	762,635	60,267	--	--	--	57,143	4,000	--	--	--	--	1,848	95,897
All species	191,816	33,504	13,512	2,200	1,002,814	79,221	344	--	--	57,143	4,000	900	5	356	366	1,849	121,490

(Table 3 continued on next page)

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(Table 3 continued)

NORTHWEST UNIT

Species	Saw logs		Veneer logs		Pulpwood		Cabin logs	Cooperage		Industrial fuelwood		Poles		Posts		Other products	All products
	MBF [2]	MCF [3]	MBF [2]	MCF [3]	Cords [4]	MCF [3]	MCF [3]	MBF [2]	MCF [3]	Cords [4]	MCF [3]	Pieces	MCF [3]	M pieces	MCF [3]	MCF [3]	MCF [3]
Softwoods																	
Balsam fir	330	69	--	--	50,474	3,978	--	--	--	--	--	--	--	--	--	--	4,047
Tamarack	28	6	--	--	4,643	366	--	--	--	--	--	--	--	--	--	--	372
Spruce	694	146	--	--	18,093	1,426	--	--	--	--	--	--	--	--	--	--	1,572
Jack pine	11,760	2,468	1	*	158,962	12,542	1	--	--	--	--	--	--	--	--	--	15,011
Red pine	22,648	3,855	*	*	65,889	5,205	23	--	--	--	--	517	3	27	28	--	9,114
White pine	9,437	1,606	20	3	6,161	487	3	--	--	--	--	--	--	--	--	--	2,099
N. white-cedar	21	4	--	--	3	*	--	--	--	--	--	--	--	--	--	1	5
Hemlock	33	6	--	--	2,750	217	--	--	--	--	--	--	--	--	--	--	223
Total	44,950	8,160	21	3	306,975	24,221	27	--	--	--	--	517	3	27	28	1	32,443
Hardwoods																	
Soft maple	11,189	1,997	173	28	70,645	5,588	--	--	--	--	--	--	--	--	--	--	7,613
Hard maple	18,518	3,094	1,482	241	87,030	6,875	--	--	--	--	--	--	--	--	--	--	10,211
White birch	8,373	1,495	1,698	276	117,152	9,266	--	--	--	--	--	--	--	--	--	--	11,037
Yellow birch	1,613	288	220	36	6,215	491	--	--	--	--	--	--	--	--	--	--	815
Hickory	281	50	--	--	79	6	--	--	--	--	--	--	--	--	--	--	56
Hackberry	79	14	--	--	--	--	--	--	--	--	--	--	--	--	--	--	14
Beech	16	3	--	--	188	15	--	--	--	--	--	--	--	--	--	--	18
Ash	3,739	667	27	4	29,865	2,359	--	--	--	--	--	--	--	--	--	--	3,031
Butternut	43	8	--	--	--	--	--	--	--	--	--	--	--	--	--	--	8
Black walnut	1	*	--	--	--	--	--	--	--	--	--	--	--	--	--	--	*
Cottonwood	3	1	--	--	453	36	--	--	--	--	--	--	--	--	--	--	36
Balsam poplar	--	--	17	3	396	31	--	--	--	--	--	--	--	--	--	--	34
Aspen	33,351	5,823	2,426	395	538,594	42,549	--	--	--	7,732	541	--	--	--	--	1,453	50,762
Black cherry	120	21	16	3	*	*	--	--	--	--	--	--	--	--	--	--	24
Red oak	26,780	4,689	2,283	372	21,848	1,728	--	48	7	300	21	--	--	--	--	--	6,816
White oak	3,579	627	167	27	6,171	488	--	--	--	--	--	--	--	--	--	--	1,142
Basswood	12,978	2,317	523	85	14,971	1,183	--	6	1	--	--	--	--	--	--	--	3,585
Elm	112	20	--	--	6,866	542	--	--	--	--	--	--	--	--	--	--	562
Other hardwoods	--	--	--	--	2,632	208	--	--	--	--	--	--	--	--	--	--	208
Total	120,775	21,114	9,032	1,470	903,106	71,366	--	54	7	8,032	562	--	--	--	--	1,453	95,973
All species	165,726	29,274	9,053	1,474	1,210,081	95,587	27	54	7	8,032	562	517	3	27	28	1,454	128,416

CENTRAL UNIT

Species	Saw logs		Veneer logs		Pulpwood		Cabin logs	Cooperage		Industrial fuelwood		Poles		Posts		Other products	All products
	MBF [2]	*MCF* [3]	*MBF* [2]	*MCF* [3]	*Cords* [4]	*MCF* [3]	*MCF* [3]	*MBF* [3]	*MCF*	*Cords* [4]	*MCF* [3]	*Pieces*	*MCF* [3]	*M pieces*	*MCF* [3]	*MCF* [3]	*MCF* [3]
Softwoods																	
Balsam fir	6	1	--	--	503	40	--	--	--	--	--	--	--	--	--	--	41
Tamarack	6	1	--	--	554	44	--	--	--	--	--	--	--	--	--	--	45
Spruce	1	*	--	--	889	70	--	--	--	--	--	--	--	--	--	--	70
Jack pine	540	113	*	*	113,496	8,955	--	--	--	--	--	--	--	--	--	--	9,068
Red pine	7,594	1,293	26	4	132,763	10,488	160	--	--	--	--	1,574	9	43	45	9	12,009
White pine	10,327	1,758	38	6	17,862	1,411	75	--	--	--	--	--	--	--	--	5	3,255
N. white-cedar	42	9	--	--	--	--	3	--	--	--	--	--	--	1	1	--	13
Hemlock	68	12	--	--	1,558	123	--	--	--	--	--	--	--	--	--	--	135
Total	18,584	3,187	64	10	267,623	21,131	239	--	--	--	--	1,574	9	44	45	14	24,636
Hardwoods																	
Soft maple	10,136	1,809	166	27	28,580	2,261	--	--	--	176	12	--	--	--	--	--	4,109
Hard maple	8,406	1,405	668	109	35,048	2,769	--	--	--	117	8	--	--	--	--	--	4,290
White birch	977	174	221	36	24,958	1,974	--	--	--	6	*	--	--	--	--	3	2,188
Yellow birch	325	58	20	3	2,377	188	--	--	--	--	--	--	--	--	--	--	249
Hickory	929	166	1	*	564	45	--	--	--	--	--	--	--	--	--	--	211
Hackberry	5	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1
Beech	78	14	--	--	152	12	--	--	--	--	--	--	--	--	--	--	26
Ash	2,837	506	6	1	12,492	987	--	--	--	57	4	--	--	--	--	--	1,498
Butternut	45	8	--	--	--	--	--	--	--	--	--	--	--	--	--	--	8
Black walnut	3	1	8	1	--	--	--	--	--	--	--	--	--	--	--	--	2
Cottonwood	106	19	--	--	179	14	--	--	--	--	--	--	--	--	--	--	33
Balsam poplar	10	2	--	--	46	4	--	--	--	--	--	--	--	--	--	--	5
Aspen	14,016	2,447	426	69	169,534	13,393	--	--	--	--	--	--	--	--	--	274	16,184
Black cherry	221	40	56	9	--	--	--	--	--	--	--	--	--	--	--	--	49
Red oak	44,253	7,749	1,350	220	52,853	4,181	--	--	--	614	43	--	--	--	--	--	12,192
White oak	12,360	2,164	982	160	13,032	1,031	--	--	--	101	7	--	--	--	--	--	3,362
Basswood	4,748	848	152	25	3,993	315	--	--	--	--	--	--	--	--	--	8	1,196
Elm	302	54	--	--	5,024	397	--	--	--	--	--	--	--	--	--	--	451
Other hardwoods	--	--	--	--	1,216	96	--	--	--	--	--	--	--	--	--	--	96
Total	99,758	17,464	4,056	660	350,048	27,665	--	--	--	1,071	75	--	--	--	--	286	46,150
All species	118,342	20,650	4,120	671	617,671	48,796	239	--	--	1,071	75	1,574	9	44	45	300	70,786

(Table 3 continued on next page)

(Table 3 continued)

SOUTHWEST UNIT

Species	Saw logs		Veneer logs		Pulpwood		Cabin logs	Cooperage		Industrial fuelwood		Poles		Posts		Other products	All products
	MBF [2]	*MCF* [3]	*MBF* [2]	*MCF* [3]	*Cords* [4]	*MCF* [3]	*MCF* [3]	*MBF* [2]	*MCF* [3]	*Cords* [4]	*MCF* [3]	*Pieces*	*MCF* [3]	*M pieces*	*MCF* [3]	*MCF* [3]	*MCF* [3]
Softwoods																	
Balsam fir	--	--	--	--	3	*	--	--	--	--	--	--	--	--	--	--	*
Eastern redcedar	27	6	--	--	--	--	--	--	--	--	--	--	--	--	--	--	6
Tamarack	--	--	--	--	6	*	--	--	--	--	--	--	--	--	--	--	*
Spruce	34	7	--	--	710	56	--	--	--	--	--	--	--	--	--	--	63
Jack pine	99	21	*	*	6,271	495	--	--	--	--	--	--	--	--	--	--	516
Red pine	4,194	714	*	*	27,867	2,202	11	--	--	--	--	--	--	236	243	--	3,186
White pine	1,910	325	*	*	4,636	366	8	--	--	--	--	--	--	--	--	--	699
Total	6,265	1,073	*	*	39,494	3,119	19	--	--	--	--	--	--	236	243	--	4,470
Hardwoods																	
Soft maple	5,207	929	48	8	1,471	116	--	--	--	10	1	--	--	--	--	--	1,136
Hard maple	12,102	2,022	873	142	2,282	180	--	--	--	31	2	--	--	--	--	--	2,347
White birch	624	111	73	12	2,903	230	--	--	--	8	1	--	--	--	--	--	369
Yellow birch	10	2	3	*	96	8	--	--	--	--	--	--	--	--	--	--	10
Hickory	1,913	342	10	2	--	--	--	--	--	--	--	--	--	--	--	--	343
Hackberry	153	27	--	--	--	--	--	--	--	--	--	--	--	--	--	--	27
Beech	--	--	--	--	1	*	--	--	--	--	--	--	--	--	--	--	*
Ash	3,313	591	3	1	1,001	79	--	--	--	--	--	--	--	--	--	--	671
Butternut	146	26	--	--	--	--	--	--	--	--	--	--	--	--	--	--	26
Black walnut	974	174	--	--	--	--	--	--	--	--	--	--	--	--	--	--	174
Cottonwood	1,003	179	--	--	7	1	--	--	--	--	--	--	--	--	--	--	213
Balsam poplar	23	4	--	--	7	1	--	--	--	--	--	--	--	--	--	--	5
Aspen	8,784	1,534	147	24	23,615	1,866	--	--	--	--	--	--	--	--	--	--	3,662
Black cherry	1,036	185	124	20	--	--	--	--	--	4	*	--	--	--	--	--	205
Red oak	58,283	10,205	2,215	361	3,037	240	--	38	5	15	1	--	--	--	--	--	10,820
White oak	19,281	3,376	688	112	595	47	--	416	57	8	1	--	--	1	1	--	3,606
Willow	68	12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	12
Basswood	6,620	1,182	154	25	519	41	--	5	1	--	--	--	--	--	--	--	1,248
Elm	1,652	295	--	--	45	4	--	--	--	--	--	--	--	--	--	--	298
Other hardwoods	--	--	--	--	263	21	--	--	--	--	--	--	--	--	--	--	21
Total	121,192	21,197	4,339	706	35,840	2,832	--	459	63	77	5	--	--	1	1	--	25,194
All species	127,457	22,269	4,339	706	75,334	5,951	19	459	63	77	5	--	--	237	244	--	29,665

SOUTHEAST UNIT

Species	Saw logs		Veneer logs		Pulpwood		Cabin logs	Cooperage		Industrial fuelwood		Poles		Posts		Other products	All products
	MBF [2]	MCF [3]	MBF [2]	MCF [3]	Cords [4]	MCF [3]	MCF [3]	MBF [2]	MCF [3]	Cords [4]	MCF [3]	Pieces	MCF [3]	M pieces	MCF [3]	MCF [3]	MCF [3]
Softwoods																	
Balsam fir	--	--	--	--	197	16	--	--	--	--	--	--	--	--	--	--	16
Tamarack	12	2	--	--	64	5	--	--	--	--	--	--	--	--	--	--	7
Spruce	24	5	--	--	1,284	101	--	--	--	--	--	--	--	--	--	--	106
Jack pine	11	2	--	--	1,077	85	--	--	--	--	--	--	--	--	--	--	87
Red pine	309	53	--	--	14,519	1,147	5	--	--	--	--	130	1	--	--	--	1,205
White pine	1,674	285	--	--	4,852	383	11	--	--	--	--	--	--	--	--	--	679
N. white-cedar	575	121	--	--	--	--	19	--	--	--	--	--	--	36	37	--	176
Hemlock	193	33	--	--	79	6	--	--	--	--	--	--	--	--	--	--	39
Total	2,798	501	--	--	22,073	1,743	35	--	--	--	--	130	1	36	37	--	2,316
Hardwoods																	
Soft maple	4,353	777	16	3	986	78	--	--	--	2	*	--	--	--	--	--	858
Hard maple	3,079	515	629	102	953	75	--	--	--	4	*	--	--	--	--	--	693
White birch	286	51	233	38	1,137	90	--	--	--	2	*	--	--	--	--	--	179
Yellow birch	34	6	2	*	285	23	--	--	--	--	--	--	--	--	--	--	29
Hickory	376	67	--	--	--	--	--	--	--	--	--	--	--	--	--	--	67
Hackberry	31	6	--	--	--	--	--	--	--	--	--	--	--	--	--	--	6
Beech	385	69	21	3	--	--	--	--	--	--	--	--	--	--	--	--	72
Ash	1,869	334	229	37	395	31	--	--	--	--	--	--	--	--	--	--	402
Butternut	82	15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	15
Black walnut	147	26	--	--	--	--	--	--	--	--	--	--	--	--	--	--	26
Cottonwood	544	97	16	3	4	*	--	--	--	--	--	--	--	--	--	--	100
Balsam poplar	45	8	--	--	908	72	--	--	--	--	--	--	--	--	--	--	80
Aspen	1,340	234	42	7	10,675	843	--	--	--	--	--	--	--	--	--	--	1,161
Black cherry	445	80	14	2	1	*	--	--	--	--	--	--	--	--	--	--	82
Red oak	7,873	1,379	757	123	1,252	99	--	--	--	6	*	--	--	--	--	--	1,601
White oak	5,005	876	331	54	454	36	--	--	--	4	*	--	--	--	--	--	966
Willow	50	9	--	--	--	--	--	--	--	--	--	--	--	--	--	--	9
Basswood	1,313	234	286	47	359	28	--	--	--	--	--	--	--	--	--	--	309
Elm	386	69	10	2	8	1	--	--	--	--	--	--	--	--	--	--	71
Other hardwoods	2	*	--	--	18	1	--	--	--	--	--	--	--	--	--	--	2
Total	27,646	4,851	2,585	421	17,435	1,378	--	--	--	19	1	--	--	--	--	--	6,727
All species	30,444	5,352	2,585	421	39,508	3,121	35	--	--	19	1	130	1	36	37	--	9,043

* = Less than 1/2 unit of measure.

1 Based on factors obtained from the Wisconsin Utilization Study, 1994.

2 Thousand board feet, International 1/4-inch rule.

3 Thousand cubic feet.

4 Standard cords are 128 cubic feet consisting of 79 cubic feet of wood and 49 cubic feet of bark and air space.

Rows and columns may not sum due to rounding.

Table 4.--*Pulpwood production by year, product form, and species group, Wisconsin, 1946-1996*

(In thousand standard cords, unpeeled) [1]

		Product form									
		Roundwood								Residue	
		Species group									
Year	Total	Pine	Balsam fir	Hemlock	Spruce	Cedar & tamarack	Aspen	Birch	Other hardwoods	Soft-woods	Hard-woods
1946	433	75	48	64	32	3	202	4	5	*	*
1947	497	157	53	50	31	6	187	8	5	*	*
1948	472	117	87	51	34	3	167	8	5	*	*
1949	427	72	78	47	33	1	184	10	--	*	2
1950	468	93	69	47	31	*	195	6	20	1	6
1951	565	102	55	51	30	1	281	28	17	--	--
1952	582	95	76	66	39	1	275	15	15	--	--
1953	553	71	45	51	26	1	306	12	41	--	--
1954	691	113	56	63	31	4	348	27	49	--	--
1955	710	121	48	58	23	4	365	16	75	--	--
1956	960	140	45	56	23	4	507	21	164	--	--
1957	934	126	60	57	27	6	453	27	178	--	--
1958	828	148	62	55	23	6	369	18	147	--	--
1959	972	186	52	49	21	6	431	26	159	5	37
1960	1,052	124	50	52	18	6	540	27	204	4	27
1961	1,078	154	61	47	23	7	530	34	201	3	18
1962	1,140	188	46	42	15	6	572	41	188	6	36
1963	1,302	170	60	52	19	6	613	50	233	13	86
1964	1,244	168	57	52	20	5	603	41	222	11	65
1965	1,253	207	50	60	15	4	607	24	197	14	75
1966	1,536	215	55	69	17	3	810	39	243	12	73
1967	1,417	174	48	42	13	3	739	84	203	10	101
1968	1,298	199	51	44	11	5	629	57	185	16	101
1969	1,450	216	50	51	13	2	697	62	238	15	106
1970	1,656	259	68	53	16	4	771	76	296	19	94
1971	1,552	268	54	42	12	3	736	51	269	16	101
1972	1,538	246	49	42	13	3	685	47	333	10	110
1973	1,758	232	67	32	16	1	761	73	400	21	155
1974	2,053	291	85	45	19	2	797	102	506	26	180
1975	1,505	240	98	45	25	4	588	83	244	36	142
1976	1,840	286	89	43	19	3	694	114	425	38	129
1977	1,816	297	73	43	19	5	696	103	383	48	149

1978	1,895	358	75	52	20	4	669	121	373	40	183
1979 [2]	2,109	361	84	40	19	2	751	151	441	49	211
1980	2,362	388	101	34	32	4	873	185	456	40	249
1981	2,389	419	105	29	27	5	965	159	389	47	244
1982	2,285	494	103	33	28	7	884	154	339	42	201
1983	2,475	412	85	40	28	6	1,025	198	422	48	211
1984	2,647	483	84	25	42	4	1,067	208	439	47	248
1985	2,588	452	72	37	36	2	1,073	193	431	51	241
1986	2,926	500	46	37	30	2	1,208	283	528	52	240
1987	2,869	489	45	42	36	2	1,097	256	605	47	250
1988	3,084	574	71	46	43	4	1,171	279	606	56	234
1989	3,161	550	67	43	45	5	1,208	333	619	59	232
1990	3,093	620	66	38	49	9	1,096	331	658	48	179
1991	3,146	695	64	33	33	7	1,090	268	595	94	268
1992	3,306	695	61	29	41	5	1,216	307	654	63	235
1993	3,270	692	61	23	34	8	1,129	261	730	68	264
1994	3,465	738	63	33	31	9	1,159	263	826	68	276
1995	3,482	695	73	28	40	9	1,214	309	747	191	176
1996	3,310	712	92	25	37	11	1,109	275	685	75	289

* *= Less than 500 cords.*

[1] *Standard cords are 128 cubic feet consisting of 79 cubic feet of wood and 49 cubic feet of bark and air space.*

[2] *Includes logs, bolts, and wood residue used in manufacturing particleboard and waferboard after 1979.*

Rows and columns may not sum due to rounding.

Table 5.--*Pulpwood production by product form, species group, and destination, Wisconsin, 1996*

(In thousand standard cords, unpeeled)

Product form and species group	Total	Destination: Michigan	Minnesota	Wisconsin	Other[3]
Roundwood					
Softwoods					
Balsam fir	92	2	17	73	--
Hemlock	25	7	--	19	--
Jack pine	352	12	4	337	--
Red pine	316	8	6	302	--
White pine	43	*	*	43	--
N. white-cedar	*	*	--	--	--
Spruce	37	1	3	33	--
Tamarack	10	*	--	10	--
Total	876	30	30	816	--
Hardwoods					
Ash	77	7	--	70	--
Aspen	1,109	45	27	1,036	--
Balsam poplar	6	5	*	1	--
Basswood	51	9	--	41	--
Beech	1	*	--	1	--
White birch	250	43	2	204	--
Yellow birch	25	11	--	14	--
Cottonwood	1	--	--	1	--
Elm	27	*	--	27	--
Hickory	1	--	--	1	--
Hard maple	212	20	1	191	--
Soft maple	167	13	1	153	--
Red oak	109	11	--	99	--
White oak	25	--	--	25	--
Other hardwoods	8	1	--	7	--
Total	2,069	165	32	1,872	--
Total roundwood	2,945	195	62	2,689	--
Residues					
Softwood	75	11	1	62	1
Hardwood	289	12	5	269	2
Total	364	23	6	332	3
All wood material	3,309	218	68	3,020	3

*= Less than 500 standard cords, unpeeled.

Standard cords are 128 cubic feet consisting of 79 cubic feet of wood and 49 cubic feed of bark and air space.

Chippable mill residues such as slabs, edgings, etc. Roundwood chips are included in roundwood.

Includes other States and Canada.

Rows and columns may not sum due to rounding.

Table 6.--*Pulpwood production from roundwood by Forest Survey Unit, county, and species group, Wisconsin, 1996*

(In standard cords, unpeeled) [1]

Forest Survey Unit and county[2]	All species	Balsam fir	Hemlock	Jack pine	Red pine	White pine	N. white-cedar	Spruce	Tamarack	Ash	Aspen	Balsam poplar
Northeast												
Florence	78,667	2,347	3,490	6,269	5,924	260	40	1,303	120	2,262	29,616	1,012
Forest	108,263	7,087	2,763	1,323	5,246	440	--	2,909	129	4,243	40,166	917
Langlade	115,718	8,567	1,312	628	2,975	393	--	2,192	306	4,756	48,162	163
Lincoln	135,092	4,036	511	2,321	3,922	602	--	1,508	710	5,165	63,686	99
Marinette	114,173	2,886	581	20,433	16,336	1,196	--	1,404	296	1,890	44,228	1,547
Menominee	81,895	2,107	10,063	4,565	6,660	1,925	384	858	278	2,486	26,811	329
Oconto	52,453	487	409	3,828	6,088	376	--	604	--	1,208	23,765	379
Oneida	149,884	8,930	595	5,781	11,259	2,261	--	3,531	2,700	5,554	44,905	358
Shawano	31,981	224	778	110	3,238	219	--	133	264	1,228	13,956	1
Vilas	134,687	4,180	295	27,105	13,610	2,237	--	1,203	127	4,097	31,507	198
Total	1,002,814	40,852	20,798	72,364	75,258	9,908	423	15,646	4,930	32,889	366,803	5,001
Northwest												
Ashland	72,410	3,640	220	714	2,196	939	--	2,748	319	2,542	35,806	34
Barron	27,330	14	--	363	900	372	--	255	--	478	19,710	4
Bayfield	170,989	4,055	160	45,061	7,404	957	--	1,250	32	3,387	67,349	21
Burnett	67,254	37	--	21,573	10,696	248	--	451	152	763	25,667	2
Douglas	184,260	23,675	--	40,970	16,916	649	--	4,991	274	1,180	65,181	147
Iron	134,907	7,154	631	638	1,436	376	3	2,143	147	4,524	73,075	56
Polk	43,720	19	22	12,176	2,677	133	--	22	29	539	22,202	3
Price	121,267	4,219	150	4,285	3,351	624	--	2,513	2,078	4,312	55,276	79
Rusk	63,954	287	32	193	1,180	211	--	470	182	3,210	27,526	16
Sawyer	145,460	3,506	204	2,498	6,766	970	--	2,585	213	5,027	64,508	7
Taylor	69,458	2,435	1,313	32	1,047	100	--	393	372	2,561	35,746	22
Washburn	109,073	1,435	17	30,460	11,321	583	--	272	845	1,341	46,548	4
Total	1,210,081	50,474	2,750	158,962	65,889	6,161	3	18,093	4,643	29,865	538,594	396
Central												
Adams	79,505	20	--	28,748	30,966	2,677	--	10	6	223	6,363	1
Chippewa	30,315	36	103	50	1,947	120	--	15	170	589	20,127	4
Clark	105,422	1	96	5,666	3,889	1,159	--	25	67	3,272	51,375	14
Eau Claire	31,956	--	--	4,513	5,119	399	--	16	--	810	10,354	1
Jackson	83,679	126	43	24,810	10,004	2,474	--	160	30	2,304	15,101	1
Juneau	57,663	--	--	22,161	12,844	1,801	--	4	--	564	3,036	2
Marathon	54,704	281	791	1,344	4,681	741	--	196	--	2,438	21,302	11
Marquette	12,558	--	--	722	9,075	1,169	--	--	--	93	304	1
Monroe	31,804	--	--	11,610	4,747	1,463	--	--	100	495	4,755	2
Portage	42,997	37	388	7,464	16,364	1,294	--	156	169	528	9,387	5
Waupaca	17,723	--	112	178	6,083	627	--	25	--	558	5,327	2
Waushara	28,590	1	14	1,113	21,678	2,330	--	43	12	148	1,067	1
Wood	40,756	--	13	5,116	5,368	1,608	--	239	--	469	21,037	1
Total	617,671	503	1,558	113,496	132,763	17,862	--	889	554	12,492	169,534	46

Southwest												
Buffalo	6,505	–	–	18	484	327	–	60	–	85	4,756	1
Crawford	990	–	–	–	492	132	–	22	–	7	67	1
Dunn	18,159	–	–	1,156	6,873	986	–	66	–	332	5,222	1
Grant	2,575	–	–	11	2,072	119	–	–	–	17	23	–
Iowa	3,354	–	–	1,142	1,397	203	–	66	6	5	269	–
La Crosse	4,630	–	–	1,208	2,059	227	–	–	–	66	389	–
Lafayette	13	–	–	–	–	–	–	–	–	1	–	–
Pepin	3,261	–	–	153	143	359	–	156	–	123	1,337	1
Pierce	1,499	–	–	–	195	179	–	38	–	15	849	1
Richland	2,181	–	–	623	1,173	273	–	5	–	1	21	–
Sauk	9,568	3	–	1,707	4,290	809	–	47	–	163	337	1
St. Croix	9,641	–	–	166	960	143	–	251	–	17	7,612	–
Trempealeau	12,137	–	–	73	7,053	819	–	–	–	165	2,734	1
Vernon	823	–	–	14	676	59	–	–	–	5	–	–
Total	75,334	3	–	6,271	27,867	4,636	–	710	6	1,001	23,615	7
Southeast												
Brown	11,083	–	–	36	1,403	22	–	22	–	76	8,243	905
Calumet	21	–	–	–	–	–	–	–	–	3	–	–
Columbia	7,227	32	–	509	4,771	473	–	131	–	40	108	–
Dane	557	–	–	15	168	175	–	13	–	17	–	–
Dodge	46	–	–	–	–	–	–	–	–	–	25	–
Door	3,788	105	11	–	480	699	–	383	–	28	883	–
Fond Du Lac	468	–	–	–	38	34	–	–	–	12	82	–
Green	355	–	–	31	231	84	–	–	–	–	–	–
Green Lake	2,742	–	–	67	1,467	553	–	50	–	7	89	1
Jefferson	1,259	–	–	20	613	600	–	15	–	1	–	–
Kenosha	24	–	–	–	–	24	–	–	–	–	–	–
Kewaunee	126	–	–	–	85	28	–	–	–	2	–	–
Manitowoc	1,419	15	14	233	854	112	–	98	–	12	–	–
Milwaukee	29	–	14	–	16	–	–	–	–	–	–	–
Outagamie	3,858	–	11	–	957	250	–	104	–	163	1,085	1
Ozaukee	28	–	–	–	–	28	–	–	–	–	–	–
Racine	508	–	–	117	–	173	–	206	–	1	–	–
Rock	1,513	16	–	25	1,159	276	–	38	–	–	–	–
Sheboygan	644	30	–	–	349	44	–	25	–	1	131	1
Walworth	2,190	–	–	–	1,365	724	–	39	64	–	–	–
Washington	566	–	29	–	39	206	–	66	–	24	28	–
Waukesha	972	–	–	27	495	302	–	96	–	6	–	–
Winnebago	86	–	–	–	30	44	–	–	–	–	–	–
Total	39,508	197	79	1,077	14,519	4,852	–	1,284	64	395	10,675	908
State total	2,945,409	92,028	25,184	352,170	316,296	43,419	427	36,623	10,197	76,641	1,109,221	6,358

(Table 6 continued on next page)

(Table 6 continued)

Forest Survey Unit and county [2]	Basswood	Beech	White birch	Yellow birch	Cotton-wood	Elm	Hickory	Hard maple	Soft maple	Red oak	White oak	Other hardwoods
Northeast												
Florence	2,619	8	8,467	1,865	11	217	--	5,858	3,921	2,712	229	117
Forest	2,259	91	11,586	2,155	22	2,823	--	11,456	9,143	2,516	819	169
Langlade	2,823	66	12,320	1,871	46	2,150	--	13,109	10,246	2,376	1,065	191
Lincoln	5,413	156	11,396	1,629	99	4,766	--	12,738	10,114	4,858	552	811
Marinette	2,222	--	8,009	1,868	3	21	--	4,815	3,291	2,767	276	104
Menominee	213	247	2,102	1,256	1	2,420	--	9,308	9,082	404	133	262
Oconto	1,723	9	5,117	1,233	11	272	--	3,050	2,099	1,629	95	70
Oneida	9,707	12	21,101	2,168	192	524	--	13,030	8,025	7,024	870	1,356
Shawano	109	41	2,012	391	1	1,247	--	3,774	3,689	404	150	12
Vilas	3,870	5	21,486	1,893	57	243	--	9,568	5,849	5,558	687	911
Total	30,958	635	103,597	16,329	443	14,684	--	86,706	65,460	30,249	4,877	4,004
Northwest												
Ashland	581	3	6,836	559	6	197	79	7,116	5,929	1,224	609	113
Barron	251	--	1,510	36	4	8	--	1,378	1,162	675	128	81
Bayfield	892	--	17,975	539	10	124	--	9,831	7,906	2,812	977	248
Burnett	238	--	2,420	131	2	34	--	2,009	1,583	898	259	90
Douglas	153	--	17,339	191	1	34	--	7,082	4,656	554	205	62
Iron	4,392	79	11,198	1,520	54	2,463	--	11,140	7,893	4,913	447	624
Polk	198	--	2,120	70	3	17	--	1,209	1,670	443	101	65
Price	4,138	21	12,572	690	79	742	--	11,889	9,101	3,770	714	666
Rusk	1,541	12	8,281	609	225	682	--	9,249	7,458	1,692	721	176
Sawyer	881	13	24,026	1,010	7	603	--	15,196	13,581	2,428	1,239	193
Taylor	1,394	57	7,028	688	60	1,834	--	6,878	5,169	1,589	530	209
Washburn	313	3	5,846	172	3	126	--	4,052	4,537	848	241	105
Total	14,971	188	117,152	6,215	453	6,866	79	87,030	70,645	21,848	6,171	2,632
Central												
Adams	98	--	375	6	1	1	--	531	357	7,633	1,423	65
Chippewa	536	--	2,130	139	118	137	--	1,794	1,327	697	205	72
Clark	1,093	22	8,454	607	33	778	564	8,839	7,292	8,958	2,945	273
Eau Claire	223	1	1,935	114	1	55	--	2,140	1,494	3,656	1,003	120
Jackson	382	--	3,847	181	1	42	--	7,198	6,017	8,750	1,966	243
Juneau	178	--	1,129	69	2	20	--	1,524	1,096	11,036	2,110	87
Marathon	615	104	3,194	814	11	3,167	--	6,799	6,071	1,514	552	80
Marquette	57	--	183	12	1	2	--	227	153	417	123	20
Monroe	193	--	836	26	2	6	--	1,341	1,011	4,166	946	104
Portage	273	8	841	155	5	265	--	1,509	1,294	2,120	717	19
Waupaca	173	17	645	140	2	508	--	1,363	1,127	644	103	89
Waushara	78	--	277	23	1	18	--	388	289	796	291	24
Wood	93	--	1,113	92	1	25	--	1,395	1,053	2,468	649	19
Total	3,993	152	24,958	2,377	179	5,024	564	35,048	28,580	52,853	13,032	1,216

Southwest												
Buffalo	49	–	192	10	1	2	–	208	133	139	21	18
Crawford	29	–	13	–	1	–	–	13	7	155	48	3
Dunn	111	1	1,242	55	1	29	–	836	568	504	126	51
Grant	6	–	40	5	–	5	–	48	33	146	50	1
Iowa	1	–	14	1	–	–	–	16	10	173	51	–
La Crosse	44	–	113	–	–	–	–	122	58	269	46	27
Lafayette	–	–	3	–	–	–	–	4	3	1	–	–
Pepin	73	–	267	4	1	1	–	242	122	227	5	45
Pierce	34	–	94	1	1	4	–	31	21	29	–	7
Richland	2	–	1	–	–	–	–	1	1	60	20	–
Sauk	79	–	309	10	1	2	–	378	235	947	203	46
St. Croix	3	–	304	3	–	1	–	46	106	23	6	2
Trempealeau	85	–	303	5	1	1	–	329	168	326	13	61
Vernon	2	–	9	–	–	–	–	9	4	37	6	2
Total	519	1	2,903	96	7	45	–	2,282	1,471	3,037	595	263
Southeast												
Brown	208	–	16	3	1	1	–	31	94	8	9	3
Calumet	1	–	4	–	–	–	–	5	2	5	–	1
Columbia	4	–	71	7	–	1	–	122	104	595	254	2
Dane	7	–	29	–	–	–	–	34	19	67	6	7
Dodge	–	–	–	–	–	–	–	–	–	16	5	–
Door	28	–	808	201	–	–	–	72	53	35	–	1
Fond Du Lac	1	–	27	3	–	1	–	33	24	158	54	–
Green	–	–	–	–	–	–	–	–	–	7	2	–
Green Lake	26	–	19	2	1	–	–	21	15	311	112	1
Jefferson	–	–	*	*	–	–	–	4	4	–	–	–
Kenosha	–	–	–	–	–	–	–	–	–	–	–	–
Kewaunee	–	–	1	1	–	–	–	4	5	–	–	–
Manitowoc	–	–	5	4	–	–	–	34	39	–	–	–
Milwaukee	–	–	–	–	–	–	–	–	–	–	–	–
Outagamie	30	–	136	52	1	5	–	497	522	34	8	2
Ozaukee	–	–	–	–	–	–	–	–	–	–	–	–
Racine	–	–	1	*	–	–	–	4	5	–	–	–
Rock	–	–	–	–	–	–	–	–	–	–	–	–
Sheboygan	52	–	*	*	1	–	–	4	4	–	–	1
Walworth	–	–	–	–	–	–	–	–	–	–	–	–
Washington	1	–	16	8	–	–	–	68	73	6	–	1
Waukesha	–	–	3	3	–	–	–	19	21	–	–	–
Winnebago	–	–	–	–	–	–	–	–	–	8	3	–
Total	359	–	1,137	285	4	8	–	953	986	1,252	454	19
State total	50,800	976	249,747	25,302	1,086	26,627	643	212,019	167,141	109,239	25,130	8,135

** = Less than one standard cord*

[1] *Standard cords are 128 cubic feet consisting of 79 cubic feet of wood and 49 cubic feet of bark and air space.*

[2] *Includes only those counties that supplied pulpwood in 1996.*

Rows and columns may not sum due to rounding.

Table 7.--*Pulpwood receipts by year, product form, and species group, Wisconsin, 1946-1996*

(In thousand standard cords, unpeeled) [1]

		Product form									
		Roundwood								Residue	
		Species group									
Year	Total	Pine	Balsam fir	Hemlock	Spruce	Cedar & tamarack	Aspen	Birch	Other hardwoods	Soft-woods	Hard-woods
1946	1,902	298	280	233	645	16	416	14	*	*	*
1947	1,722	292	230	134	687	19	346	13	*	*	1
1948	1,741	307	279	136	663	5	333	17	*	*	1
1949	1,426	227	244	101	502	3	332	15	*	*	2
1950	1,442	244	238	91	441	3	387	10	21	1	6
1951	2,097	428	232	120	678	10	569	42	18	--	--
1952	2,059	365	288	131	732	6	490	32	15	--	--
1953	1,689	283	179	76	529	2	552	26	42	--	--
1954	1,919	298	228	125	608	5	566	40	49	--	--
1955	1,777	319	199	92	471	5	590	26	75	--	--
1956	2,136	397	195	143	445	9	754	27	166	--	--
1957	2,247	325	254	116	578	14	739	38	183	--	--
1958	1,866	318	200	90	479	18	583	19	159	--	--
1959	1,881	436	169	87	345	17	619	30	165	7	6
1960	2,114	388	176	97	389	26	785	31	208	7	7
1961	1,972	330	177	92	350	19	741	44	196	12	11
1962	2,124	395	155	99	317	19	784	49	206	51	49
1963	2,429	414	175	114	341	22	877	64	235	96	91
1964	2,271	350	139	110	314	20	855	62	233	96	92
1965	2,290	410	114	120	300	19	899	26	219	91	92
1966	2,701	473	139	162	301	11	1,112	44	270	100	89
1967	2,729	415	140	100	308	42	1,115	91	259	135	124
1968	2,226	405	100	86	200	33	860	59	205	160	118
1969	2,514	456	81	112	208	25	978	63	278	192	121
1970	2,821	498	111	118	208	43	1,088	81	333	189	152
1971	2,581	514	88	83	167	37	1,011	53	295	193	140
1972	2,450	443	82	69	181	31	902	48	354	198	142
1973	2,696	387	103	54	224	28	1,006	68	398	279	149
1974	3,135	508	133	69	161	36	1,109	115	558	257	189
1975	2,344	391	155	73	146	30	791	89	288	216	165
1976	2,713	437	137	66	121	34	926	133	486	256	117
1977	2,596	416	109	43	94	31	915	120	445	299	124

1978	2,676	491	99	50	82	25	888	145	450	301	145
1979[2]	3,067	567	115	39	76	21	999	178	548	332	192
1980	3,266	518	147	40	94	34	1,118	231	562	268	254
1981	3,154	512	135	31	86	31	1,182	189	477	252	259
1982	2,978	565	131	36	79	37	1,092	173	434	209	222
1983	3,114	470	114	43	65	27	1,220	217	502	222	234
1984	3,301	540	108	26	95	15	1,269	228	552	204	264
1985	3,104	500	97	39	80	4	1,250	202	494	198	240
1986	3,270	543	59	40	63	4	1,370	240	518	192	241
1987	3,130	538	45	46	73	3	1,199	220	592	157	257
1988	3,287	641	59	48	97	6	1,223	233	555	181	244
1989	3,339	627	60	45	104	6	1,247	274	582	150	244
1990	3,334	685	59	41	125	13	1,158	277	628	177	171
1991	3,311	766	50	33	95	9	1,181	205	539	174	258
1992	3,534	775	54	31	112	7	1,309	268	594	163	220
1993	3,485	789	55	26	102	10	1,207	224	653	160	259
1994	3,748	846	62	34	98	12	1,250	253	755	159	279
1995	3,794	766	61	25	117	19	1,360	307	672	301	167
1996	3,764	796	146	21	189	21	1,218	266	644	170	294

* = *Less than 500 cords.*

1 *Standard cords are 128 cubic feet consisting of 79 cubic feet of wood and 49 cubic feet of bark and air space.*

2 *Includes logs, bolts, and wood residue used in manufacturing particleboard and waferboard after 1979.*

Rows and columns may not sum due to rounding.

Table 8.--*Pulpwood receipts by year and area of origin, Wisconsin, 1960-1996*

(In thousand standard cords, unpeeled) [1]

Year	All areas	Area of origin				
		Michigan	Minnesota	Wisconsin	Other States	Canada
1960	2,115	510	308	1,008	82	207
1961	1,972	464	240	1,050	44	174
1962	2,124	540	216	1,114	108	146
1963	2,429	628	221	1,262	153	165
1964	2,272	588	193	1,207	135	149
1965	2,290	608	159	1,225	135	163
1966	2,701	666	193	1,501	185	156
1967	2,729	660	299	1,387	234	149
1968	2,227	455	166	1,259	223	124
1969	2,513	537	188	1,412	257	119
1970	2,820	610	219	1,627	249	115
1971	2,581	567	188	1,502	234	90
1972	2,450	470	166	1,493	230	91
1973	2,697	418	194	1,671	291	123
1974	3,135	534	261	2,004	269	67
1975	2,344	449	178	1,460	177	80
1976	2,713	434	182	1,784	203	110
1977	2,596	407	154	1,713	227	95
1978	2,676	404	162	1,779	242	89
1979 [2]	3,067	516	169	2,024	266	92
1980	3,266	490	216	2,298	170	92
1981	3,155	419	177	2,320	164	75
1982	2,979	396	179	2,231	131	42
1983	3,114	391	155	2,399	137	32
1984	3,301	442	184	2,534	134	7
1985	3,104	392	105	2,465	127	15
1986	3,270	369	69	2,693	116	23
1987	3,130	313	62	2,644	90	21
1988	3,288	311	79	2,771	102	25
1989	3,338	319	116	2,799	90	14
1990	3,334	313	127	2,768	108	19
1991	3,311	304	101	2,799	88	17

1992	3,534	323	105	2,997	103	6
1993	3,485	272	146	2,970	80	17
1994	3,748	310	164	3,167	81	25
1995	3,794	346	178	3,168	83	19
1996	3,764	267	352	3,020	95	30

[1] *Standard cords are 128 cubic feet consisting of 79 cubic feet of wood and 49 cubic feet of bark and air space.*

[2] *Includes logs, bolts, and wood residue used in manufacturing particleboard and waferboard after 1979*

Rows and columns may not sum due to rounding.

Table 9.--*Pulpwood receipts by product form, species group, and area of origin, Wisconsin, 1996*

(In thousand standard cords, unpeeled) [1]

Product form and species group	Total receipts	Area of origin: Michigan	Minnesota	Wisconsin	Other States	Canada
Roundwood						
Softwoods						
Balsam fir	146	11	60	73	--	1
Hemlock	21	3	--	19	--	--
Jack pine	399	42	20	337	*	--
Red pine	353	29	20	302	2	--
White pine	44	1	*	43	--	--
Spruce	189	46	101	33	--	9
Tamarack	21	*	11	10	--	--
Total	1,173	133	212	816	2	10
Hardwoods						
Ash	73	3	1	70	--	--
Aspen	1,218	87	89	1,036	--	6
Balsam poplar	3	*	2	1	--	--
Basswood	45	3	*	41	--	--
Beech	1	--	--	1	--	--
White birch	251	6	38	204	--	2
Yellow birch	15	1	--	14	--	--
Cottonwood	1	*	--	1	--	--
Elm	27	*	--	27	--	--
Hickory	1	--	--	1	--	--
Hard maple	201	7	2	191	--	--
Soft maple	159	5	1	153	--	--
Red oak	101	2	*	99	--	--
White oak	26	1	*	25	--	--
Other hardwoods	8	*	*	7	--	--
Total	2,128	116	132	1,872	--	8
All species	3,301	249	344	2,689	2	18
Residues [2]						
Softwood	170	2	1	62	92	12
Hardwood	294	16	7	269	1	--
Total	463	18	8	332	93	12
All wood material	3,764	267	352	3,020	95	30

** = Less than 500 standard cords, unpeeled.*

[1] *Standard cords are 128 cubic feet consisting of 79 cubic feet of wood and 49 cubic feet of bark and air space.*

[2] *Chippable mill residues such as slabs, edgings, etc. Roundwood chips are included in roundwood.*

Rows and columns may not sum due to rounding.

Table 10.--*Saw log production and receipts by species group, Wisconsin, 1994 and 1996*

(In thousand board feet) [1]

	Production			Receipts		
Species group	1994	1996	Change	1994	1996	Change
Softwoods						
Balsam fir	592	1,024	73%	755	1,045	38%
Eastern redcedar	23	27	17%	23	27	17%
Tamarack	42	96	129%	73	100	37%
Spruce	1,216	1,479	22%	1,947	1,886	-3%
Jack pine	14,341	15,928	11%	8,418	10,299	22%
Red pine	52,582	50,531	-4%	46,015	45,062	-2%
White pine	28,488	31,180	9%	28,069	29,253	4%
N. white-cedar	867	1,564	80%	876	1,427	63%
Hemlock	4,678	4,023	-14%	4,958	4,290	-13%
Total	102,829	105,853	3%	91,134	93,389	2%
Hardwoods						
Soft maple	37,896	40,208	6%	39,456	41,790	6%
Hard maple	70,098	76,843	10%	77,924	82,584	6%
White birch	22,267	20,674	-7%	23,545	23,067	-2%
Yellow birch	4,937	4,315	-13%	5,585	6,706	20%
Hickory	2,437	3,716	52%	2,285	3,521	54%
Hackberry	205	268	31%	187	157	-16%
Beech	1,446	1,284	-11%	1,439	1,317	-8%
Ash	19,315	15,738	-19%	19,476	16,174	-17%
Butternut	274	382	39%	274	483	76%
Black walnut	697	1,125	61%	519	907	75%
Cottonwood	1,442	1,729	20%	1,070	1,413	32%
Balsam poplar	90	648	620%	107	660	517%
Aspen	115,003	112,645	-2%	123,572	118,374	-4%
Black cherry	4,705	2,087	-56%	4,859	2,243	-54%
Red oak	167,561	157,561	-6%	167,782	167,153	0%
White oak	50,652	44,114	-13%	50,427	45,599	-10%
Willow	49	118	141%	--	--	--
Basswood	38,574	41,808	8%	44,002	45,655	4%
Elm	4,766	2,664	-44%	3,342	2,871	-14%
Other hardwoods	20	2	-90%	4	2	-50%
Total	542,434	527,931	-3%	565,855	560,677	-1%
All species	645,263	633,784	-1.78%	656,989	654,066	-0.44%

[1] *International 1/4-inch rule.*

Rows and columns may not sum due to rounding.

Table 11.--*Saw log production by Forest Survey Unit, species group, and destination, Wisconsin, 1996*

(In thousand board feet) [1]

ALL UNITS

Species group	Total	Destination				
		Wisconsin	Illinois	Iowa	Michigan	Minnesota
Softwoods						
Balsam fir	1,024	835	--	--	189	--
Eastern redcedar	27	27	--	--	--	--
Tamarack	96	96	--	--	--	--
Spruce	1,479	1,128	--	--	202	149
Jack pine	15,928	8,232	--	--	--	7,696
Red pine	50,531	39,022	--	--	118	11,390
White pine	31,180	28,327	69	--	24	2,760
N. white-cedar	1,564	1,099	--	--	465	--
Hemlock	4,023	4,019	--	--	4	--
Total	105,853	82,786	69	--	1,002	21,996
Hardwoods						
Soft maple	40,208	38,964	184	273	787	--
Hard maple	76,843	73,580	39	505	2,686	32
White birch	20,674	19,563	--	--	1,111	--
Yellow birch	4,315	4,055	--	--	260	--
Hickory	3,716	3,396	69	251	--	--
Hackberry	268	146	69	54	--	--
Beech	1,284	1,284	--	--	--	--
Ash	15,738	15,134	74	315	216	--
Butternut	382	382	--	--	--	--
Black walnut	1,125	558	230	337	--	--
Cottonwood	1,729	1,373	75	282	--	--
Balsam poplar	648	648	--	--	--	--
Aspen	112,645	111,390	--	119	1,103	34
Black cherry	2,087	1,873	93	60	61	--
Red oak	157,561	150,576	84	3,813	3,066	23
White oak	44,114	42,287	150	1,645	--	32
Willow	118	--	69	49	--	--
Basswood	41,808	40,861	69	692	187	--
Elm	2,664	2,476	72	116	--	--
Other hardwoods	2	2	--	--	--	--
Total	527,931	508,546	1,276	8,511	9,476	121
All species	633,784	591,332	1,345	8,511	10,478	22,117

NORTHEAST UNIT

		Destination				
Species group	Total	Wisconsin	Illinois	Iowa	Michigan	Minnesota
Softwoods						
Balsam fir	689	500	--	--	189	--
Tamarack	50	50	--	--	--	--
Spruce	726	524	--	--	202	--
Jack pine	3,519	3,519	--	--	--	--
Red pine	15,786	15,667	--	--	118	--
White pine	7,832	7,808	--	--	24	--
N. white-cedar	927	462	--	--	465	--
Hemlock	3,729	3,724	--	--	4	--
Total	33,256	32,254	--	--	1,002	--
Hardwoods						
Soft maple	9,323	8,947	--	--	376	--
Hard maple	34,737	32,578	--	--	2,159	--
White birch	10,413	10,305	--	--	109	--
Yellow birch	2,333	2,238	--	--	95	--
Hickory	217	217	--	--	--	--
Beech	806	806	--	--	--	--
Ash	3,979	3,765	--	--	214	--
Butternut	66	66	--	--	--	--
Cottonwood	73	73	--	--	--	--
Balsam poplar	571	571	--	--	--	--
Aspen	55,153	54,585	--	--	569	--
Black cherry	264	254	--	--	10	--
Red oak	20,373	20,311	--	--	62	--
White oak	3,889	3,889	--	--	--	--
Basswood	16,149	16,000	--	--	149	--
Elm	213	213	--	--	--	--
Total	158,559	154,816	--	--	3,743	--
All species	191,816	187,070	--	--	4,745	--

(Table 11 continued on next page)

(Table 11 continued)

NORTHWEST UNIT

Species group	Total	Destination				
		Wisconsin	Illinois	Iowa	Michigan	Minnesota
Softwoods						
Balsam fir	330	330	--	--	--	--
Tamarack	28	28	--	--	--	--
Spruce	694	545	--	--	--	149
Jack pine	11,760	4,063	--	--	--	7,696
Red pine	22,648	11,257	--	--	--	11,390
White pine	9,437	6,677	--	--	--	2,760
N. white-cedar	21	21	--	--	--	--
Hemlock	33	33	--	--	--	--
Total	44,950	22,954	--	--	--	21,996
Hardwoods						
Soft maple	11,189	10,778	--	--	410	--
Hard maple	18,518	17,991	--	--	527	--
White birch	8,373	7,371	--	--	1,002	--
Yellow birch	1,613	1,447	--	--	165	--
Hickory	281	281	--	--	--	--
Hackberry	79	79	--	--	--	--
Beech	16	16	--	--	--	--
Ash	3,739	3,738	--	--	2	--
Butternut	43	43	--	--	--	--
Black walnut	1	1	--	--	--	--
Cottonwood	3	3	--	--	--	--
Aspen	33,351	32,784	--	--	534	33
Black cherry	120	70	--	--	51	--
Red oak	26,780	23,776	--	--	3,004	*
White oak	3,579	3,579	--	--	--	--
Basswood	12,978	12,941	--	--	37	--
Elm	112	112	--	--	--	--
Total	120,775	115,010	--	--	5,733	33
All species	165,726	137,964	--	--	5,733	22,029

CENTRAL UNIT

Species group	Total	Destination				
		Wisconsin	Illinois	Iowa	Michigan	Minnesota
Softwoods						
Balsam fir	6	6	--	--	--	--
Tamarack	6	6	--	--	--	--
Spruce	1	1	--	--	--	--
Jack pine	540	540	--	--	--	--
Red pine	7,594	7,594	--	--	--	--
White pine	10,327	10,327	--	--	--	--
N. white-cedar	42	42	--	--	--	--
Hemlock	68	68	--	--	--	--
Total	18,584	18,584	--	--	--	--
Hardwoods						
Soft maple	10,136	10,136	--	--	--	--
Hard maple	8,406	8,406	--	--	--	--
White birch	977	977	--	--	--	--
Yellow birch	325	325	--	--	--	--
Hickory	929	929	--	--	--	--
Hackberry	5	5	--	--	--	--
Beech	78	78	--	--	--	--
Ash	2,837	2,837	--	--	--	--
Butternut	45	45	--	--	--	--
Black walnut	3	3	--	--	--	--
Cottonwood	106	106	--	--	--	--
Balsam poplar	10	10	--	--	--	--
Aspen	14,016	14,016	--	--	--	--
Black cherry	221	221	--	--	--	--
Red oak	44,253	44,253	--	--	--	--
White oak	12,360	12,360	--	--	--	--
Basswood	4,748	4,748	--	--	--	--
Elm	302	302	--	--	--	--
Total	99,758	99,758	--	--	--	--
All species	118,342	118,342	--	--	--	--

(Table 11 continued on next page)

(Table 11 continued)

SOUTHWEST UNIT

Species group	Total	Destination				
		Wisconsin	Illinois	Iowa	Michigan	Minnesota
Softwoods						
Eastern redcedar	27	27	--	--	--	--
Spruce	34	34	--	--	--	--
Jack pine	99	99	--	--	--	--
Red pine	4,194	4,194	--	--	--	--
White pine	1,910	1,869	41	--	--	--
Total	6,265	6,223	41	--	--	--
Hardwoods						
Soft maple	5,207	4,810	123	273	--	--
Hard maple	12,102	11,534	31	505	--	32
White birch	624	624	--	--	--	--
Yellow birch	10	10	--	--	--	--
Hickory	1,913	1,602	60	251	--	--
Hackberry	153	38	61	54	--	--
Ash	3,313	2,955	43	315	--	--
Butternut	146	146	--	--	--	--
Black walnut	974	416	222	337	--	--
Cottonwood	1,003	662	58	282	--	--
Balsam poplar	23	23	--	--	--	--
Aspen	8,784	8,665	--	119	--	1
Black cherry	1,036	886	89	60	--	--
Red oak	58,283	54,363	84	3,813	--	23
White oak	19,281	17,454	150	1,645	--	32
Willow	68	--	19	49	--	--
Basswood	6,620	5,864	64	692	--	--
Elm	1,652	1,464	72	116	--	--
Total	121,192	111,515	1,077	8,511	--	88
All species	127,457	117,738	1,119	8,511	--	88

SOUTHEAST UNIT

Species group	Total	Destination				
		Wisconsin	Illinois	Iowa	Michigan	Minnesota
Softwoods						
Tamarack	12	12	--	--	--	--
Spruce	24	24	--	--	--	--
Jack pine	11	11	--	--	--	--
Red pine	309	309	--	--	--	--
White pine	1,674	1,647	28	--	--	--
N. white-cedar	575	575	--	--	--	--
Hemlock	193	193	--	--	--	--
Total	2,798	2,770	28	--	--	--
Hardwoods						
Soft maple	4,353	4,293	60	--	--	--
Hard maple	3,079	3,071	8	--	--	--
White birch	286	286	--	--	--	--
Yellow birch	34	34	--	--	--	--
Hickory	376	367	9	--	--	--
Hackberry	31	23	8	--	--	--
Beech	385	385	--	--	--	--
Ash	1,869	1,839	30	--	--	--
Butternut	82	82	--	--	--	--
Black walnut	147	138	9	--	--	--
Cottonwood	544	528	16	--	--	--
Balsam poplar	45	45	--	--	--	--
Aspen	1,340	1,340	--	--	--	--
Black cherry	445	442	4	--	--	--
Red oak	7,873	7,873	--	--	--	--
White oak	5,005	5,005	--	--	--	--
Willow	50	--	50	--	--	--
Basswood	1,313	1,308	5	--	--	--
Elm	386	386	--	--	--	--
Other hardwoods	2	2	--	--	--	--
Total	27,646	27,447	199	--	--	--
All species	30,444	30,218	226	--	--	--

* = *Less than 500 board feet.*

[1] *International 1/4-inch rule.*

Rows and cloumns may not sum due to rounding.

Table 12.--*Saw log production by Forest Survey Unit, county, and species group, Wisconsin, 1996*

(In thousand board feet) [1]

Forest Survey Unit and county	Balsam fir	Red-cedar	Tama-rack	Spruce	Jack pine	Red pine	White pine	N. white-cedar	Hem-lock	Total softwoods	Soft maple	Hard maple	White birch	Yellow birch	Hickory
Northeast															
Florence	15	--	3	25	143	276	97	--	436	996	214	4,298	950	443	--
Forest	160	--	13	183	227	2,329	501	85	672	4,170	731	6,810	1,907	769	4
Langlade	15	--	6	4	54	631	142	3	16	870	1,300	6,501	1,042	287	14
Lincoln	64	--	--	28	32	1,563	669	3	3	2,362	1,259	2,023	448	53	1
Marinette	102	--	15	167	427	3,237	704	220	294	5,167	2,718	2,935	2,139	494	30
Menominee	3	--	--	31	--	203	1,550	65	2,145	3,998	487	4,398	301	30	104
Oconto	9	--	13	175	--	75	253	107	2	634	503	443	1,171	7	1
Oneida	111	--	--	21	377	4,690	1,883	9	49	7,139	528	1,196	957	48	--
Shawano	1	--	1	1	108	41	603	420	108	1,282	1,364	4,612	297	163	62
Vilas	208	--	--	91	2,151	2,741	1,428	17	2	6,638	220	1,521	1,201	39	--
Total	689	--	50	726	3,519	15,786	7,832	927	3,729	33,256	9,323	34,737	10,413	2,333	217
Northwest															
Ashland	11	--	1	60	246	1,137	893	11	7	2,366	997	3,025	1,021	455	--
Barron	--	--	1	--	1	259	630	--	--	891	275	536	267	14	21
Bayfield	38	--	--	174	3,910	7,906	3,552	1	4	15,584	286	765	1,787	46	--
Burnett	--	--	--	--	2,312	2,047	959	--	--	5,319	48	35	38	--	--
Douglas	1	--	--	1	1,875	2,921	741	1	--	5,541	152	205	722	3	--
Iron	203	--	--	176	333	419	392	--	5	1,528	606	1,946	981	286	--
Polk	--	--	--	--	--	431	31	--	--	462	246	151	53	2	--
Price	64	--	24	263	1,528	3,407	367	5	7	5,665	1,840	2,379	452	239	--
Rusk	--	--	--	2	--	521	152	--	--	675	1,409	2,965	521	101	236
Sawyer	7	--	3	10	230	1,531	1,094	--	6	2,881	1,566	4,099	1,761	315	14
Taylor	5	--	--	--	47	378	266	--	4	699	3,647	2,280	487	74	11
Washburn	--	--	--	8	1,278	1,690	360	2	--	3,337	116	131	282	79	--
Total	330	--	28	694	11,760	22,648	9,437	21	33	44,950	11,189	18,518	8,373	1,613	281
Central															
Adams	--	--	--	--	168	1,123	1,730	--	--	3,021	51	12	11	--	10
Chippewa	--	--	--	--	--	1,674	826	--	--	2,500	1,111	451	162	11	11
Clark	--	--	--	--	90	226	1,493	--	--	1,809	1,346	401	113	11	224
Eau Claire	--	--	--	--	2	743	183	--	--	928	333	285	32	1	15
Jackson	--	--	--	--	119	758	1,333	--	--	2,210	1,096	156	36	--	363
Juneau	--	--	--	--	15	624	904	--	--	1,543	319	162	38	--	40
Marathon	6	--	--	1	4	334	649	1	46	1,041	2,350	4,769	284	286	85
Marquette	--	--	--	--	--	36	142	--	--	178	27	11	--	--	--
Monroe	--	--	--	--	--	227	315	--	--	541	373	381	11	--	117
Portage	--	--	--	--	15	1,173	842	--	--	2,030	920	161	176	8	16
Waupaca	--	--	6	--	11	234	1,154	41	22	1,467	1,642	1,068	75	6	22
Waushara	--	--	--	--	--	375	311	--	--	687	151	255	32	--	--
Wood	--	--	--	--	117	68	443	--	--	628	416	294	7	1	26
Total	6	--	6	1	540	7,594	10,327	42	68	18,584	10,136	8,406	977	325	929

Southwest															
Buffalo	–	–	–	–	–	196	1	–	–	197	550	434	223	–	276
Crawford	–	–	–	–	–	3	7	–	–	10	315	1,141	15	–	130
Dunn	–	–	–	28	99	2,047	519	–	–	2,692	1,033	1,012	93	9	51
Grant	–	–	–	–	–	544	100	–	–	644	363	1,025	2	–	172
Iowa	–	–	–	–	–	68	309	–	–	377	155	366	2	–	102
La Crosse	–	–	–	–	–	–	26	–	–	26	255	169	62	–	138
Lafayette	–	–	–	–	–	3	5	–	–	7	–	–	–	–	3
Pepin	–	4	–	–	–	222	90	–	–	317	183	237	17	–	67
Pierce	–	–	–	7	–	10	163	–	–	180	43	1,660	21	1	95
Richland	–	–	–	–	–	8	36	–	–	44	509	1,998	8	–	277
Sauk	–	10	–	–	–	646	344	–	–	1,001	926	933	15	–	260
St. Croix	–	13	–	–	–	173	127	–	–	313	256	335	73	–	18
Trempealeau	–	–	–	–	–	274	18	–	–	292	325	128	75	–	135
Vernon	–	–	–	–	–	–	164	–	–	164	293	2,664	20	–	189
Total	–	27	–	34	99	4,194	1,910	–	–	6,265	5,207	12,102	624	10	1,913
Southeast															
Brown	–	–	–	–	–	–	153	108	51	312	205	140	31	–	11
Calumet	–	–	–	3	–	–	220	22	–	245	242	108	–	–	2
Columbia	–	–	–	–	9	29	69	–	–	107	31	106	5	–	38
Dane	–	–	–	1	–	3	24	4	–	32	72	132	2	–	66
Dodge	–	–	–	–	–	2	10	8	2	23	169	151	–	–	41
Door	–	–	–	–	2	47	93	110	45	298	54	185	114	24	11
Fond Du Lac	–	–	–	1	–	–	54	–	–	55	245	72	–	–	5
Green	–	–	–	–	–	8	11	–	–	18	45	231	–	–	43
Green Lake	–	–	–	–	–	3	19	1	–	24	87	59	–	–	23
Jefferson	–	–	–	–	–	–	55	4	–	59	201	115	–	–	31
Kenosha	–	–	–	–	–	–	–	–	–	–	–	–	–	–	10
Kewaunee	–	–	12	12	–	5	69	135	50	283	340	122	22	–	11
Manitowoc	–	–	–	4	–	83	297	146	34	564	884	356	28	5	27
Milwaukee	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Outagamie	–	–	–	–	–	33	162	26	11	231	468	93	65	–	32
Ozaukee	–	–	–	–	–	–	–	1	–	1	324	30	–	–	–
Racine	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Rock	–	–	–	1	–	1	1	1	–	6	3	4	–	–	–
Sheboygan	–	–	–	1	–	–	41	5	–	47	292	633	13	5	12
Walworth	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Washington	–	–	–	–	–	–	8	*	–	8	239	266	–	–	5
Waukesha	–	–	–	–	–	–	54	2	–	56	58	59	–	–	2
Winnebago	–	–	–	–	–	95	334	–	–	429	393	217	5	–	5
Total	–	–	12	24	11	309	1,674	575	193	2,798	4,353	3,079	286	34	376
State total	1,024	27	96	1,479	15,928	50,531	31,180	1,564	4,023	105,853	40,208	76,843	20,674	4,315	3,716

(Table 12 continued on next page)

(Table 12 contined)

Forest Survey Unit and county	Hack-berry	Beech	Ash	Butter-nut	Black walnut	Cotton-wood	Balsam poplar	Aspen	Black cherry	Red oak	White oak	Willow	Bass-wood	Elm	Other hardwoods	Total hardwoods	All species
Northeast																	
Florence	--	1	72	--	--	--	201	3,787	14	244	6	--	1,737	9	--	11,974	12,970
Forest	--	11	466	10	--	--	18	11,476	74	1,218	18	--	4,408	46	--	27,966	32,137
Langlade	--	17	534	10	--	--	5	7,251	76	1,668	36	--	3,370	12	--	22,123	22,994
Lincoln	--	--	575	9	--	--	--	3,440	11	691	36	--	774	8	--	9,328	11,690
Marinette	--	104	1,260	--	--	25	331	12,682	22	6,477	311	--	1,145	36	--	30,708	35,875
Menominee	--	436	81	17	--	--	--	3,453	4	4,084	3,117	--	2,655	13	--	19,181	23,179
Oconto	--	55	151	2	--	33	5	3,375	--	1,629	217	--	140	33	--	7,765	8,399
Oneida	--	--	182	4	--	--	5	4,613	22	796	6	--	393	--	--	8,751	15,890
Shawano	--	180	601	14	--	14	5	1,407	39	3,076	136	--	1,395	56	--	13,422	14,705
Vilas	--	1	57	--	--	--	--	3,670	3	490	6	--	132	--	--	7,341	13,979
Total	--	806	3,979	66	--	73	571	55,153	264	20,373	3,889	--	16,149	213	--	158,559	191,816
Northwest																	
Ashland	--	2	281	--	--	--	--	1,468	11	2,034	3	--	886	10	--	10,194	12,561
Barron	3	--	220	5	1	1	--	2,866	4	3,576	857	--	916	13	--	9,576	10,467
Bayfield	--	--	100	7	--	--	--	2,810	--	3,889	28	--	163	11	--	9,891	25,475
Burnett	--	--	2	2	--	1	--	1,320	1	750	232	--	47	4	--	2,481	7,800
Douglas	--	--	3	--	--	--	--	1,592	--	797	16	--	1,775	--	--	5,265	10,806
Iron	--	1	144	1	--	--	--	1,345	60	227	7	--	547	8	--	6,159	7,687
Polk	--	5	97	3	--	1	--	640	2	1,794	778	--	183	10	--	3,967	4,429
Price	--	2	674	--	--	--	--	3,848	12	768	181	--	1,157	5	--	11,558	17,223
Rusk	61	--	840	12	--	--	--	6,905	6	5,453	787	--	2,247	15	--	21,558	22,233
Sawyer	--	2	477	7	--	--	--	3,938	9	4,596	225	--	2,909	27	--	19,945	22,826
Taylor	--	--	844	1	--	--	--	3,154	11	1,403	249	--	2,052	6	--	14,219	14,918
Washburn	15	3	57	4	--	--	--	3,464	3	1,494	216	--	97	2	--	5,963	9,300
Total	79	16	3,739	43	1	3	--	33,351	120	26,780	3,579	--	12,978	112	--	120,775	165,726
Central																	
Adams	--	--	37	1	--	--	--	273	5	1,395	259	--	35	15	--	2,104	5,125
Chippewa	1	--	425	8	--	--	--	2,234	5	3,495	1,223	--	461	5	--	9,603	12,103
Clark	--	--	237	1	--	5	--	2,516	1	2,789	1,724	--	237	5	--	9,613	11,423
Eau Claire	--	--	75	2	--	5	--	730	18	2,703	746	--	42	12	--	5,000	5,928
Jackson	--	--	55	--	--	45	--	674	55	11,341	2,498	--	186	40	--	16,545	18,755
Juneau	--	--	107	3	--	--	4	267	23	4,170	1,456	--	301	58	--	6,948	8,491
Marathon	--	23	1,086	11	--	--	--	4,069	22	2,856	578	--	2,081	19	--	18,519	19,560
Marquette	--	--	16	--	--	--	--	10	--	368	125	--	5	--	--	563	741
Monroe	4	--	165	6	--	12	--	435	85	7,425	1,940	--	241	129	--	11,325	11,866
Portage	--	--	141	--	--	--	--	779	--	1,645	298	--	80	6	--	4,230	6,260
Waupaca	--	55	336	11	3	40	5	971	1	2,846	787	--	806	5	--	8,681	10,148
Waushara	--	--	73	--	--	--	--	298	--	1,738	486	--	140	--	--	3,173	3,860
Wood	--	--	82	1	--	--	--	760	6	1,482	240	--	131	6	--	3,454	4,082
Total	5	78	2,837	45	3	106	10	14,016	221	44,253	12,360	--	4,748	302	--	99,758	118,342

Southwest																	
Buffalo	24	–	132	–	1	262	5	1,416	190	9,955	1,942	2	429	100	–	15,941	16,138
Crawford	12	–	281	13	230	10	–	122	50	4,025	1,515	–	502	131	–	8,491	8,501
Dunn	5	–	519	18	–	57	5	1,572	79	3,453	1,757	–	493	68	–	10,223	12,915
Grant	64	–	466	27	328	301	–	248	83	5,239	2,066	49	771	281	–	11,486	12,130
Iowa	14	–	203	13	260	–	–	110	55	2,814	1,467	–	373	75	–	6,009	6,386
La Crosse	16	–	182	5	17	31	–	146	78	6,049	1,740	–	432	192	–	9,513	9,539
Lafayette	–	–	14	–	18	–	–	–	17	129	195	–	30	3	–	410	417
Pepin	–	–	156	–	–	25	–	812	14	1,269	535	–	256	24	–	3,595	3,912
Pierce	–	–	144	1	3	120	–	331	4	1,628	486	–	620	56	–	5,215	5,395
Richland	10	–	440	26	72	–	3	856	55	5,156	1,580	–	811	250	–	12,051	12,096
Sauk	5	–	358	36	17	–	3	2,325	179	6,639	2,109	–	649	195	–	14,649	15,650
St. Croix	–	–	71	1	–	10	–	196	1	1,122	268	–	212	15	–	2,577	2,890
Trempealeau	2	–	45	–	2	187	5	443	145	5,446	1,430	11	214	59	–	8,652	8,944
Vernon	2	–	304	5	25	–	–	207	88	5,358	2,193	6	826	201	–	12,381	12,545
Total	153	–	3,313	146	974	1,003	23	8,784	1,036	58,283	19,281	68	6,620	1,652	–	121,192	127,457
Southeast																	
Brown	–	35	137	–	–	175	–	66	23	168	102	–	62	11	–	1,166	1,478
Calumet	–	–	79	1	–	33	–	4	2	119	44	–	39	4	–	678	923
Columbia	4	–	16	10	5	2	–	40	15	1,858	668	–	70	6	–	2,875	2,982
Dane	6	–	49	42	15	6	–	24	87	1,543	1,161	–	134	47	–	3,387	3,419
Dodge	*	3	87	3	7	–	–	21	91	346	589	6	109	48	–	1,671	1,694
Door	–	36	97	10	–	13	–	34	5	69	–	–	58	9	–	718	1,016
Fond Du Lac	1	5	92	1	2	24	–	29	3	98	85	–	18	10	–	691	747
Green	–	–	104	–	93	–	–	27	18	739	372	–	107	131	–	1,909	1,928
Green Lake	–	–	31	–	–	2	–	16	19	154	242	–	16	2	2	655	678
Jefferson	–	2	98	–	6	–	–	5	80	312	543	10	87	38	–	1,529	1,588
Kenosha	–	–	–	–	2	–	–	–	1	12	39	–	–	–	–	64	64
Kewaunee	–	50	130	–	–	32	17	32	–	72	38	4	59	12	–	941	1,224
Manitowoc	1	98	225	–	–	66	11	160	10	386	78	–	103	17	–	2,454	3,019
Milwaukee	–	–	2	–	1	–	–	–	–	3	–	–	–	–	–	6	6
Outagamie	–	37	103	–	–	110	5	167	16	134	121	12	51	31	–	1,446	1,677
Ozaukee	3	11	38	–	–	32	–	–	1	107	11	–	29	–	–	585	586
Racine	–	–	2	–	–	–	–	–	–	39	18	10	–	–	–	69	69
Rock	3	–	17	4	12	3	–	–	25	77	208	–	4	10	–	370	375
Sheboygan	3	103	330	10	–	45	11	206	32	593	232	–	207	6	–	2,732	2,779
Walworth	–	–	22	–	–	1	–	–	5	32	65	–	5	–	–	131	131
Washington	9	6	89	*	–	*	–	11	3	170	57	4	57	4	–	921	929
Waukesha	1	–	47	–	3	–	–	3	5	128	95	4	24	*	–	431	488
Winnebago	1	–	73	1	–	–	–	495	3	714	237	–	73	–	–	2,217	2,646
Total	31	385	1,869	82	147	544	45	1,340	445	7,873	5,005	50	1,313	386	2	27,646	30,444
State total	268	1,284	15,738	382	1,125	1,729	648	112,645	2,087	157,561	44,114	118	41,808	2,664	2	527,931	633,784

* = *Less than 500 board feet*

[1] *International 1/4-inch rule.*

Rows and columns may not sum due to rounding.

Table 13.--*Saw log receipts by Forest Survey Unit, species group, and State of origin, Wisconsin, 1996*

(In thousand board feet) [1]

ALL UNITS

Species group	Total	State of origin							
		Illinois	Iowa	Michigan	Minnesota	Wisconsin	Kentucky	Ohio	Canada
Softwoods									
Balsam fir	1,045	--	--	210	--	835	--	--	--
Eastern redcedar	27	--	--	--	--	27	--	--	--
Tamarack	100	--	--	4	--	96	--	--	--
Spruce	1,886	--	--	756	--	1,128	--	--	2
Jack pine	10,299	--	--	1,957	110	8,232	--	--	--
Red pine	45,062	--	--	5,506	534	39,022	--	--	--
White pine	29,253	--	--	661	251	28,327	--	--	15
N. white-cedar	1,427	--	--	327	--	1,099	--	--	--
Hemlock	4,290	--	--	262	--	4,019	--	--	9
Total	93,389	--	--	9,682	895	82,786	--	--	26
Hardwoods									
Soft maple	41,790	--	80	2,383	166	38,964	--	--	197
Hard maple	82,584	--	1,105	6,775	333	73,580	--	--	792
White birch	23,067	--	--	3,114	335	19,563	--	--	56
Yellow birch	6,706	--	--	2,580	--	4,055	--	--	71
Hickory	3,521	--	31	--	94	3,396	--	--	--
Hackberry	157	--	6	--	5	146	--	--	--
Beech	1,317	--	--	30	--	1,284	--	--	3
Ash	16,174	54	156	654	122	15,134	--	--	55
Butternut	483	--	90	9	--	382	--	--	2
Black walnut	907	--	313	--	36	558	--	--	--
Cottonwood	1,413	--	1	8	31	1,373	--	--	--
Balsam poplar	660	--	--	12	--	648	--	--	--
Aspen	118,374	--	135	6,752	93	111,390	--	--	5
Black cherry	2,243	65	17	209	67	1,873	--	--	12
Red oak	167,153	324	2,988	1,755	6,800	150,576	1,291	1,502	1,918
White oak	45,599	324	1,060	91	1,824	42,287	--	--	13
Basswood	45,655	43	646	3,205	730	40,861	--	--	170
Elm	2,871	--	100	9	286	2,476	--	--	--
Other hardwoods	2	--	--	--	--	2	--	--	--
Total	560,677	810	6,729	27,585	10,921	508,546	1,291	1,502	3,293
All species	654,066	810	6,729	37,267	11,816	591,332	1,291	1,502	3,319

NORTHEAST UNIT

Species group	Total	State of origin							
		Illinois	Iowa	Michigan	Minnesota	Wisconsin	Kentucky	Ohio	Canada
Softwoods									
Balsam fir	993	--	--	210	--	783	--	--	--
Tamarack	85	--	--	4	--	81	--	--	--
Spruce	1,821	--	--	756	--	1,063	--	--	2
Jack pine	8,896	--	--	1,957	--	6,939	--	--	--
Red pine	13,188	--	--	3,004	--	10,183	--	--	--
White pine	9,746	--	--	580	--	9,152	--	--	15
N. white-cedar	551	--	--	97	--	454	--	--	--
Hemlock	3,271	--	--	46	--	3,216	--	--	9
Total	38,551	--	--	6,654	--	31,871	--	--	26
Hardwoods									
Soft maple	14,932	--	--	1,697	--	13,038	--	--	197
Hard maple	40,262	--	--	5,398	--	34,072	--	--	792
White birch	16,193	--	--	2,829	--	13,309	--	--	56
Yellow birch	4,707	--	--	2,314	--	2,322	--	--	71
Hickory	245	--	--	--	--	245	--	--	--
Beech	860	--	--	30	--	827	--	--	3
Ash	4,353	--	--	538	--	3,760	--	--	55
Butternut	93	--	--	9	--	82	--	--	2
Cottonwood	101	--	--	--	--	101	--	--	--
Balsam poplar	540	--	--	12	--	528	--	--	--
Aspen	64,461	--	--	6,205	--	58,251	--	--	5
Black cherry	384	--	--	91	--	282	--	--	12
Red oak	28,279	--	--	1,165	--	26,820	--	--	295
White oak	5,131	--	--	63	--	5,055	--	--	13
Basswood	19,673	--	--	1,764	--	17,740	--	--	170
Elm	181	--	--	--	--	181	--	--	--
Total	200,395	--	--	22,114	--	176,612	--	--	1,670
All species	238,946	--	--	28,768	--	208,483	--	--	1,696

(Table 13 continued on next page)

(Table 13 continued)

NORTHWEST UNIT

Species group	Total	State of origin							
		Illinois	Iowa	Michigan	Minnesota	Wisconsin	Kentucky	Ohio	Canada
Softwoods									
Balsam fir	52	--	--	--	--	52	--	--	--
Tamarack	4	--	--	--	--	4	--	--	--
Spruce	26	--	--	--	--	26	--	--	--
Jack pine	528	--	--	--	--	528	--	--	--
Red pine	25,278	--	--	2,431	366	22,481	--	--	--
White pine	2,925	--	--	--	--	2,925	--	--	--
N. white-cedar	249	--	--	230	--	19	--	--	--
Hemlock	9	--	--	--	--	9	--	--	--
Total	29,071	--	--	2,661	366	26,044	--	--	--
Hardwoods									
Soft maple	4,964	--	--	686	47	4,231	--	--	--
Hard maple	14,376	--	--	1,359	52	12,965	--	--	--
White birch	5,094	--	--	285	318	4,491	--	--	--
Yellow birch	1,211	--	--	255	--	956	--	--	--
Hickory	52	--	--	--	--	52	--	--	--
Hackberry	80	--	--	--	--	80	--	--	--
Beech	5	--	--	--	--	5	--	--	--
Ash	2,237	--	--	79	--	2,157	--	--	--
Butternut	32	--	--	--	--	32	--	--	--
Black walnut	1	--	--	--	--	1	--	--	--
Cottonwood	4	--	--	--	--	4	--	--	--
Aspen	25,061	--	--	531	--	24,529	--	--	--
Black cherry	136	--	--	117	--	19	--	--	--
Red oak	18,459	--	--	427	158	17,874	--	--	--
White oak	2,807	--	--	5	22	2,780	--	--	--
Basswood	11,128	--	--	1,421	48	9,659	--	--	--
Elm	66	--	--	5	--	61	--	--	--
Total	85,714	--	--	5,173	644	79,898	--	--	--
All species	114,785	--	--	7,834	1,009	105,942	--	--	--

CENTRAL UNIT

Species group	Total	State of origin							
		Illinois	Iowa	Michigan	Minnesota	Wisconsin	Kentucky	Ohio	Canada
Softwoods									
Jack pine	499	--	--	--	--	499	--	--	--
Red pine	3,476	--	--	--	--	3,476	--	--	--
White pine	10,136	--	--	--	--	10,136	--	--	--
N. white-cedar	68	--	--	--	--	68	--	--	--
Hemlock	827	--	--	216	--	611	--	--	--
Total	15,005	--	--	216	--	14,789	--	--	--
Hardwoods									
Soft maple	11,338	--	--	--	--	11,338	--	--	--
Hard maple	9,433	--	--	--	--	9,433	--	--	--
White birch	859	--	--	--	--	859	--	--	--
Yellow birch	383	--	--	11	--	373	--	--	--
Hickory	908	--	--	--	--	908	--	--	--
Hackberry	20	--	--	--	--	20	--	--	--
Beech	22	--	--	--	--	22	--	--	--
Ash	3,800	--	--	32	22	3,746	--	--	--
Butternut	42	--	--	--	--	42	--	--	--
Black walnut	3	--	--	--	--	3	--	--	--
Cottonwood	86	--	--	--	--	86	--	--	--
Aspen	19,839	--	--	11	22	19,806	--	--	--
Black cherry	189	--	--	--	--	189	--	--	--
Red oak	41,900	--	238	108	157	36,981	1,291	1,502	1,623
White oak	10,572	--	--	--	96	10,475	--	--	--
Basswood	4,923	--	--	--	130	4,793	--	--	--
Elm	40	--	--	--	--	40	--	--	--
Total	104,356	--	238	162	426	99,115	1,291	1,502	1,623
All species	119,361	--	238	378	426	113,904	1,291	1,502	1,623

(Table 13 continued on next page)

(Table 13 continued)

SOUTHWEST UNIT

Species group	Total	State of origin							
		Illinois	Iowa	Michigan	Minnesota	Wisconsin	Kentucky	Ohio	Canada
Softwoods									
Eastern redcedar	27	--	--	--	--	27	--	--	--
Spruce	28	--	--	--	--	28	--	--	--
Jack pine	376	--	--	--	110	266	--	--	--
Red pine	2,906	--	--	--	169	2,737	--	--	--
White pine	4,465	--	--	--	251	4,214	--	--	--
Total	7,801	--	--	--	529	7,272	--	--	--
Hardwoods									
Soft maple	4,863	--	80	--	120	4,663	--	--	--
Hard maple	13,762	--	1,105	17	282	12,358	--	--	--
White birch	237	--	--	--	17	220	--	--	--
Yellow birch	1	--	--	--	--	1	--	--	--
Hickory	1,850	--	31	--	94	1,725	--	--	--
Hackberry	30	--	5	--	5	20	--	--	--
Ash	3,329	--	145	4	100	3,080	--	--	--
Butternut	286	--	90	--	--	196	--	--	--
Black walnut	815	--	310	--	36	469	--	--	--
Cottonwood	702	--	--	8	31	662	--	--	--
Balsam poplar	16	--	--	--	--	16	--	--	--
Aspen	5,374	--	135	5	71	5,163	--	--	--
Black cherry	1,026	--	10	1	67	948	--	--	--
Red oak	70,147	--	2,680	55	6,485	60,927	--	--	--
White oak	21,586	--	990	23	1,706	18,867	--	--	--
Basswood	7,429	--	630	21	552	6,226	--	--	--
Elm	2,108	--	100	3	286	1,718	--	--	--
Total	133,561	--	6,311	137	9,852	117,261	--	--	--
All species	141,362	--	6,311	137	10,381	124,533	--	--	--

SOUTHEAST UNIT

Species group	Total	State of origin							
		Illinois	Iowa	Michigan	Minnesota	Wisconsin	Kentucky	Ohio	Canada
Softwoods									
Tamarack	11	--	--	--	--	11	--	--	--
Spruce	12	--	--	--	--	12	--	--	--
Red pine	215	--	--	70	--	145	--	--	--
White pine	1,981	--	--	81	--	1,900	--	--	--
N. white-cedar	559	--	--	--	--	559	--	--	--
Hemlock	183	--	--	--	--	183	--	--	--
Total	2,961	--	--	151	--	2,809	--	--	--
Hardwoods									
Soft maple	5,693	--	--	--	--	5,693	--	--	--
Hard maple	4,751	--	--	--	--	4,751	--	--	--
White birch	684	--	--	--	--	684	--	--	--
Yellow birch	403	--	--	--	--	403	--	--	--
Hickory	466	--	--	--	--	466	--	--	--
Hackberry	27	--	1	--	--	26	--	--	--
Beech	430	--	--	--	--	430	--	--	--
Ash	2,455	54	11	--	--	2,390	--	--	--
Butternut	30	--	--	--	--	30	--	--	--
Black walnut	88	--	3	--	--	85	--	--	--
Cottonwood	521	--	1	--	--	519	--	--	--
Balsam poplar	104	--	--	--	--	104	--	--	--
Aspen	3,640	--	--	--	--	3,640	--	--	--
Black cherry	507	65	7	--	--	436	--	--	--
Red oak	8,368	324	70	--	--	7,973	--	--	--
White oak	5,504	324	70	--	--	5,109	--	--	--
Basswood	2,502	43	16	--	--	2,443	--	--	--
Elm	477	--	--	--	--	477	--	--	--
Other hardwoods	2	--	--	--	--	2	--	--	--
Total	36,651	810	180	--	--	35,661	--	--	--
All species	39,611	810	180	151	--	38,470	--	--	--

[1] *International 1/4-inch rule.*

Rows and columns may not sum due to rounding.

Table 14.--*Veneer log and bolt production and receipts, Wisconsin, 1946-1996*

(In thousand board feet) [1]

Year	Production	Receipts
1946	29,267	68,116
1948	32,026	71,791
1950	26,652	62,935
1952	29,956	59,500
1954	27,109	59,573
1956	30,403	66,949
1958	23,740	43,063
1960	25,467	51,298
1963	21,919	37,517
1965	25,203	41,918
1966	23,782	43,104
1968	22,867	42,162
1969	21,037	37,571
1970	15,814	29,896
1972	19,465	36,491
1974	32,224	37,804
1975	37,342	41,605
1976	31,692	33,294
1977	31,685	36,971
1978	20,863	27,903
1980	27,250	34,540
1984	22,989	33,403
1986	26,203	37,607
1988	42,678	42,618
1990	44,227	44,177
1992	52,210	49,206
1994	52,269	59,620
1996	33,609	52,156

[1] *International 1/4-inch rule.*

Table 15.--*Veneer log and bolt production and receipts by species group, Wisconsin, 1994 and 1996*

(In thousand board feet) [1]

	Production			Receipts		
Species group	**1994**	**1996**	**Change**	**1994**	**1996**	**Change**
Softwoods						
Jack pine	3	3	0%	--	--	--
Red pine	332	79	-76%	78	78	0%
White pine	563	163	-71%	247	209	-15%
N. white-cedar	8	8	0%	8	8	0%
Spruce	738	--	-100%	--	--	--
Tamarack	133	--	-100%	--	--	--
Total	1,776	253	-86%	333	295	-11%
Hardwoods						
Ash	260	272	5%	454	386	-15%
Aspen	15,805	3,732	-76%	2,543	3,915	54%
Balsam poplar	--	17	100%	--	17	100%
Basswood	2,838	1,288	-55%	4,047	2,576	-36%
Beech	62	46	-26%	109	71	-35%
White birch	7,576	6,326	-16%	9,930	8,169	-18%
Yellow birch	679	532	-22%	1,505	1,381	-8%
River birch	--	1	100%	--	--	--
Cottonwood	156	16	-90%	520	16	-97%
Hickory	--	13	100%	23	27	17%
Hard maple	6,494	8,722	34%	15,396	17,278	12%
Soft maple	678	685	1%	1,690	1,635	-3%
Red oak	12,154	9,044	-26%	17,977	13,658	-24%
White oak	3,083	2,272	-26%	4,428	2,523	-43%
Black walnut	234	28	-88%	--	4	100%
Black cherry	474	351	-26%	665	197	-70%
Elm	--	10	100%	--	10	100%
Total	50,493	33,355	-34%	59,288	51,861	-13%
All species	52,269	33,609	-36%	59,620	52,156	-13%

[1] *International 1/4-inch rule.*

Rows and columns may not sum due to rounding.

Table 16.--*Veneer log and bolt production by species group and destination, Wisconsin, 1996*

(In thousand board feet) [1]

Species group	Total	Destination						
		Illinois	Indiana	Michigan	Missouri	Wisconsin	Ohio	Canada
Softwood								
Jack pine	3	--	--	--	--	--	3	--
Red pine	79	--	--	--	--	78	1	--
White pine	163	--	--	--	--	162	1	--
N. white-cedar	8	--	--	--	--	8	--	--
Total	253	--	--	--	--	248	5	--
Hardwood								
Soft maple	685	--	--	--	--	685	--	--
Hard maple	8,722	57	65	1,632	27	6,941	--	--
White birch	6,326	--	--	269	--	6,058	--	--
River birch	1	--	1	--	--	--	--	--
Yellow birch	532	--	--	--	--	532	--	--
Hickory	13	--	3	--	--	10	--	--
Beech	46	--	--	--	--	46	--	--
Ash	272	--	7	--	--	265	--	--
Black walnut	28	--	21	7	--	--	--	--
Cottonwood	16	--	--	--	--	16	--	--
Balsam poplar	17	--	--	--	--	17	--	--
Aspen	3,732	--	--	--	--	3,732	--	--
Black cherry	351	--	187	62	--	102	--	--
Red oak	9,044	--	61	253	--	8,670	--	59
White oak	2,272	--	61	90	--	2,122	--	--
Basswood	1,288	--	--	--	--	1,288	--	--
Elm	10	--	--	--	--	10	--	--
Total	33,355	57	406	2,312	27	30,494	--	59
All species	33,609	57	406	2,312	27	30,742	5	59

[1] *International 1/4-inch rule.*

Rows and columns may not sum due to rounding.

Table 17.--*Veneer log and bolt receipts by area of origin, Wisconsin, 1946-1996*

(In thousand board feet) [1]

Year	All areas	Area of origin				
		Wisconsin	Michigan	Minnesota	Other States	Canada [2]
1946	68,116	28,813	33,834	1,139	919	3,411
1948	71,791	31,553	27,052	4,811	1,066	73,093
1950	62,935	26,198	19,917	4,919	924	109,773
1952	59,500	28,899	15,775	5,826	1,516	7,484
1954	59,573	26,527	15,537	7,962	3,286	6,261
1956	66,949	30,298	18,932	7,221	3,405	7,093
1958	43,063	23,488	8,078	7,027	916	3,554
1960	51,298	24,249	8,659	8,380	5,207	4,803
1963	37,517	18,846	4,950	6,177	2,777	4,767
1965	41,918	23,788	5,918	6,148	1,726	4,338
1966	43,104	22,547	8,044	6,111	1,621	4,781
1968	42,162	20,458	8,265	5,207	2,642	5,590
1969	37,571	18,853	8,001	3,518	2,679	4,520
1970	29,896	15,148	7,347	2,951	1,747	2,703
1972	36,491	18,172	10,893	3,457	1,552	2,417
1974	37,804	19,643	10,922	4,083	1,950	1,206
1975	41,605	24,294	10,221	3,486	1,905	1,699
1976	33,294	20,379	9,009	2,136	1,567	203
1977	36,971	20,752	10,280	3,033	2,412	494
1978	27,903	14,299	9,029	2,468	1,587	520
1980	34,540	14,245	14,058	2,501	3,008	728
1984	33,403	20,575	9,385	2,079	1,225	139
1986	37,607	23,098	13,036	758	627	88
1988	42,618	26,030	12,550	2,929	1,092	17
1990	44,177	26,972	14,368	1,712	642	483
1992	49,207	33,916	12,049	2,204	787	251
1994	59,620	35,764	16,259	2,867	4,581	148
1996	52,156	30,742	12,475	974	6,676	1,289

1 *International 1/4-inch rule.*

2 *Includes only logs and bolts shipped to Canadian mills for processing.*

3 *Includes nominal quantities from other countries.*

Rows and columns may not sum due to rounding.

Table 18.--*Veneer log and bolt receipts by species group and area of origin, Wisconsin, 1996*

(In thousand board feet) [1]

		Area of origin									
Species group	Total	Illinois	Iowa	Michigan	Minnesota	Missouri	Wisconsin	Kentucky	Ohio	Other U.S.	Canada
Softwoods											
Red pine	78	--	--	--	--	--	78	--	--	--	--
White pine	209	--	--	47	--	--	162	--	--	--	--
N. white-cedar	8	--	--	--	--	--	8	--	--	--	--
Total	295	--	--	47	--	--	248	--	--	--	--
Hardwoods											
Soft maple	1,635	2	16	605	83	--	685	54	--	189	--
Hard maple	17,278	--	210	6,275	68	--	6,941	--	--	3,073	710
White birch	8,169	--	--	2,078	9	--	6,058	--	--	--	24
Yellow birch	1,381	--	--	752	--	--	532	--	--	11	85
Hickory	27	--	--	--	--	--	10	--	--	17	--
Beech	71	--	--	12	--	--	46	--	--	12	--
Ash	386	--	--	121	--	--	265	--	--	--	--
Black walnut	4	--	4	--	--	--	--	--	--	--	--
Cottonwood	16	--	--	--	--	--	16	--	--	--	--
Balsam poplar	17	--	--	--	--	--	17	--	--	--	--
Aspen	3,915	--	--	116	67	--	3,732	--	--	--	--
Black cherry	197	--	8	25	8	--	102	--	--	53	--
Red oak	13,658	23	543	1,747	36	8	8,670	434	11	1,718	467
White oak	2,523	18	14	12	105	22	2,122	8	79	144	--
Basswood	2,576	--	4	684	598	--	1,288	--	--	--	2
Elm	10	--	--	--	--	--	10	--	--	--	--
Total	51,861	43	799	12,429	974	30	30,494	496	90	5,218	1,289
All species	52,156	43	799	12,475	974	30	30,742	496	90	5,218	1,289

[1] *International 1/4-inch rule.*

Rows and columns may not sum due to rounding.

Table 19.--*Wood material harvested for industrial roundwood by Forest Survey Unit, species group, and source of material, WIsconsin, 1996* [1]

(In thousand cubic feet)

ALL UNITS

	Growing stock				Non-growing stock								
	Used for products		Logging		Used for products				Logging		Total		
Species group	Sawtimber	Pole-timber	residue (not used)	Total growing stock	Limbwood	Saplings	Cull trees	Dead trees	slash (not used)	Total non-growing stock	material used for products	Total material not used	Total material harvested
Softwoods													
Balsam fir	3,692.8	3,035.3	167.4	6,895.4	314.2	152.4	44.9	239.3	2,740.7	3,491.5	7,478.8	2,908.1	10,386.9
Eastern redcedar	5.0	0.6	0.4	6.0	0.1	--	*	--	2.4	2.5	5.7	2.7	8.5
Tamarack	401.1	343.9	18.7	763.7	29.9	17.3	5.1	26.5	310.2	389.0	823.8	328.9	1,152.7
Spruce	1,661.3	1,239.2	81.5	2,982.0	123.4	61.0	18.1	95.2	1,191.9	1,489.7	3,198.3	1,273.4	4,471.7
Jack pine	10,211.0	15,021.5	677.8	25,910.3	1,354.0	845.2	283.4	3,416.0	9,303.8	15,202.5	31,131.2	9,981.6	41,112.8
Red pine	19,461.3	11,503.5	779.8	31,744.7	1,477.2	932.8	648.1	306.1	8,385.7	11,749.8	34,329.0	9,165.5	43,494.5
White pine	6,686.3	1,761.0	320.3	8,767.7	251.7	125.9	95.9	67.2	2,726.0	3,266.8	8,988.1	3,046.4	12,034.5
N. white-cedar	460.9	321.4	75.7	858.0	18.6	20.8	5.2	1.1	194.3	239.9	827.9	270.0	1,097.9
Hemlock	1,513.5	897.3	56.9	2,467.7	116.4	73.0	51.2	24.2	656.1	920.9	2,675.5	713.1	3,388.6
Total	44,093.2	34,123.8	2,178.5	80,395.5	3,685.4	2,228.4	1,151.9	4,175.6	25,511.1	36,752.4	89,458.3	27,689.6	117,147.9
Hardwoods													
Soft maple	10,092.7	6,467.1	1,398.5	17,958.3	1,359.0	247.9	1,573.7	863.8	8,275.5	12,320.0	20,604.3	9,674.0	30,278.3
Hard maple	17,797.7	5,911.4	1,865.5	25,574.7	1,986.4	62.8	1,575.7	3,686.5	12,332.5	19,643.8	31,020.5	14,197.9	45,218.5
White birch	6,430.3	14,415.8	1,394.6	22,240.6	1,623.9	328.0	682.7	1,013.7	8,405.6	12,053.9	24,494.3	9,800.1	34,294.5
River birch	0.2	--	*	0.2	*	--	*	--	0.1	0.1	0.2	0.1	0.3
Yellow birch	1,294.4	633.9	176.0	2,104.4	233.5	2.6	156.0	535.3	1,135.8	2,063.1	2,855.7	1,311.8	4,167.5
Hickory	525.2	76.3	80.2	681.7	10.6	0.1	19.5	84.7	334.7	449.5	716.3	414.9	1,131.2
Hackberry	36.6	4.5	5.6	46.8	0.3	--	1.2	5.3	22.8	29.6	47.9	28.4	76.3
Beech	206.2	43.1	31.0	280.2	10.5	0.1	11.2	42.7	139.7	204.2	313.8	170.7	484.4
Ash	4,015.3	2,134.7	536.2	6,686.2	716.5	27.0	442.3	1,576.4	3,444.8	6,207.1	8,912.3	3,981.0	12,893.3
Butternut	52.1	6.4	8.0	66.5	0.5	--	1.6	7.5	32.4	42.1	68.2	40.4	108.6
Black walnut	157.7	18.8	24.4	200.9	1.5	--	5.3	22.2	96.7	125.6	205.4	121.1	326.5
Cottonwood	281.3	80.0	47.2	408.5	12.5	2.2	11.0	43.0	162.6	231.3	429.9	209.8	639.7
Balsam poplar	245.4	159.1	31.2	435.7	58.3	1.4	34.6	121.8	236.4	452.5	620.7	267.6	888.2
Aspen	69,905.8	34,261.5	6,793.7	110,961.0	3,662.9	83.5	5,511.3	1,645.8	40,734.5	51,638.0	115,070.8	47,528.2	162,599.0
Black cherry	338.5	36.8	53.7	429.0	3.7	*	15.0	42.6	195.1	256.5	436.7	248.8	685.4
Red oak	29,401.5	5,488.2	4,087.9	38,977.6	1,736.3	75.1	1,638.8	446.1	15,409.4	19,305.7	38,786.0	19,497.3	58,283.3
White oak	8,072.6	1,234.6	1,138.2	10,445.4	333.0	7.6	392.1	120.3	4,242.3	5,095.3	10,160.3	5,380.5	15,540.7
Willow	16.1	2.0	2.5	20.6	0.2	--	0.5	2.3	10.0	13.0	21.1	12.5	33.5
Basswood	7,180.9	2,297.4	1,092.9	10,571.3	523.0	50.4	410.0	1,498.5	4,724.4	7,206.3	11,960.2	5,817.3	17,777.6
Elm	1,021.0	645.9	129.8	1,796.7	243.4	3.8	146.1	520.5	1,002.0	1,915.9	2,580.8	1,131.8	3,712.6
Other hardwoods	163.9	254.5	14.9	433.3	74.6	9.7	35.1	98.6	176.2	394.2	636.4	191.1	827.5
Total	157,235.6	74,172.0	18,911.9	250,319.5	12,590.7	902.2	12,663.9	12,377.4	101,113.3	139,647.4	269,941.7	120,025.2	389,966.9
All species	201,328.8	108,295.7	21,090.4	330,715.0	16,276.1	3,130.6	13,815.7	16,553.0	126,624.4	176,399.9	359,400.0	147,714.8	507,114.9

(Table 19 continued on next page)

(Table 19 continued)

NORTHEAST UNIT

	Growing stock				Non-growing stock								
	Used for products				Used for products								
Species group	Sawtimber	Pole-timber	Logging residue (not used)	Total growing stock	Limbwood	Saplings	Cull trees	Dead trees	Logging slash (not used)	Total non-growing stock	Total material used for products	Total material not used	Total material harvested
Softwoods													
Balsam fir	1,666.2	1,391.3	80.3	3,137.7	121.0	69.9	20.6	106.2	1,270.0	1,587.7	3,375.2	1,350.2	4,725.4
Tamarack	194.7	166.4	9.1	370.1	14.5	8.4	2.5	12.8	150.3	188.4	399.2	159.4	558.6
Spruce	722.8	541.3	36.7	1,300.8	47.7	26.6	7.9	40.7	526.7	649.6	1,387.0	563.4	1,950.4
Jack pine	2,143.6	3,092.4	142.7	5,378.6	279.0	173.7	58.3	701.9	1,933.2	3,146.0	6,448.8	2,075.9	8,524.7
Red pine	5,286.6	2,721.1	212.5	8,220.2	357.2	218.2	154.8	77.0	2,257.5	3,064.7	8,814.9	2,470.1	11,285.0
White pine	1,716.4	410.9	84.5	2,211.8	59.7	28.7	23.2	16.5	696.1	824.3	2,255.4	780.6	3,036.0
N. white-cedar	315.7	278.7	60.7	655.1	15.1	18.9	4.7	1.1	128.5	168.3	634.1	189.2	823.4
Hemlock	1,314.6	744.4	50.5	2,109.5	96.9	60.3	42.3	20.4	567.2	787.2	2,279.0	617.7	2,896.7
Total	13,360.5	9,346.4	677.1	23,384.0	991.1	604.7	314.3	976.6	7,529.4	10,416.1	25,593.6	8,206.5	33,800.1
Hardwoods													
Soft maple	3,044.7	2,425.4	402.4	5,872.5	523.2	98.2	584.1	212.2	2,679.7	4,097.4	6,887.8	3,082.2	9,970.0
Hard maple	7,963.2	2,513.6	844.2	11,321.0	815.5	32.7	677.3	1,477.6	5,311.7	8,314.7	13,479.8	6,155.9	19,635.7
White birch	3,131.1	5,999.4	650.0	9,780.5	682.0	139.6	313.7	454.4	3,667.8	5,257.6	10,720.3	4,317.9	15,038.1
Yellow birch	765.6	401.5	102.6	1,269.7	150.1	1.6	97.9	336.6	692.4	1,278.6	1,753.3	795.0	2,548.3
Hickory	29.9	3.6	4.6	38.1	0.3	--	1.0	4.3	18.5	24.0	39.0	23.1	62.1
Beech	129.4	27.5	19.4	176.3	6.8	0.1	7.1	27.2	88.2	129.3	198.0	107.5	305.6
Ash	1,309.6	911.2	164.8	2,385.6	304.3	16.4	170.7	597.6	1,197.8	2,286.8	3,309.8	1,362.6	4,672.4
Butternut	9.0	1.1	1.4	11.4	0.1	--	0.3	1.3	5.6	7.2	11.7	7.0	18.7
Black walnut	2.9	--	0.5	3.4	*	--	0.3	--	0.9	1.2	3.2	1.4	4.6
Cottonwood	18.8	15.9	2.3	36.9	4.2	0.6	2.0	6.5	14.5	27.8	47.9	16.8	64.8
Balsam poplar	199.8	125.4	25.5	350.8	45.9	1.1	27.4	97.5	191.3	363.1	497.0	216.8	713.8
Aspen	26,453.8	12,272.5	2,582.7	41,309.0	1,899.0	33.7	2,079.3	564.7	15,161.6	19,738.2	43,303.0	17,744.3	61,047.3
Black cherry	58.8	6.3	9.6	74.7	1.1	*	3.8	6.7	31.1	42.8	76.7	40.8	117.5
Red oak	4,586.6	1,524.1	603.5	6,714.1	676.2	39.0	461.5	68.8	2,354.5	3,600.0	7,356.1	2,957.9	10,314.1
White oak	788.9	175.4	108.2	1,072.5	45.5	1.5	60.7	11.7	447.2	566.6	1,083.7	555.4	1,639.1
Basswood	3,079.0	1,282.3	479.5	4,840.8	306.7	32.0	198.5	722.9	2,051.6	3,311.7	5,621.5	2,531.1	8,152.5
Elm	393.2	329.5	45.6	768.3	132.4	1.5	75.8	265.6	451.2	926.5	1,198.0	496.8	1,694.8
Other hardwoods	72.2	137.9	5.7	215.7	36.7	6.4	17.1	39.4	78.2	177.9	309.7	83.8	393.6
Total	52,036.4	28,152.5	6,052.5	86,241.5	5,630.1	404.2	4,778.5	4,894.9	34,443.7	50,151.3	95,896.6	40,496.2	136,392.8
All species	65,396.9	37,498.9	6,729.6	109,625.5	6,621.2	1,008.9	5,092.8	5,871.5	41,973.1	60,567.4	121,490.2	48,702.7	170,192.9

NORTHWEST UNIT

Species group	Growing stock: Used for products: Sawtimber	Growing stock: Used for products: Pole-timber	Growing stock: Logging residue (not used)	Total growing stock	Non-growing stock: Used for products: Limbwood	Non-growing stock: Used for products: Saplings	Non-growing stock: Used for products: Cull trees	Non-growing stock: Used for products: Dead trees	Non-growing stock: Logging slash (not used)	Total non-growing stock	Total material used for products	Total material not used	Total material harvested
Softwoods													
Balsam fir	1,999.1	1,620.3	85.8	3,705.3	191.2	81.3	23.9	131.2	1,449.4	1,877.0	4,047.1	1,535.2	5,582.3
Tamarack	179.8	156.2	8.3	344.3	13.6	7.9	2.3	12.1	139.9	175.7	371.8	148.2	520.0
Spruce	819.2	600.0	39.1	1,458.2	67.2	29.5	8.7	47.0	574.8	727.2	1,571.6	613.8	2,185.4
Jack pine	5,446.8	6,886.9	369.0	12,702.6	625.8	381.5	128.4	1,541.9	4,595.3	7,272.9	15,011.2	4,964.3	19,975.6
Red pine	5,915.1	2,462.5	256.6	8,634.2	332.4	192.0	136.4	75.8	2,476.8	3,213.3	9,114.1	2,733.4	11,847.5
White pine	1,716.7	289.8	86.4	2,092.9	45.4	17.9	14.5	14.4	688.0	780.2	2,098.7	774.4	2,873.1
N. white-cedar	4.4	1.0	0.4	5.8	0.1	*	*	*	1.9	2.0	5.4	2.3	7.8
Hemlock	100.7	94.6	2.8	198.0	11.9	8.0	5.5	2.2	46.3	73.9	222.9	49.1	271.9
Total	16,181.7	12,111.2	848.4	29,141.3	1,287.4	718.0	319.8	1,824.7	9,972.4	14,122.3	32,442.7	10,820.8	43,263.6
Hardwoods													
Soft maple	3,429.1	2,626.3	456.2	6,511.5	564.8	104.9	637.2	250.8	2,998.2	4,555.8	7,613.0	3,454.4	11,067.4
Hard maple	5,072.8	2,258.0	529.7	7,860.5	802.0	22.9	548.3	1,507.1	3,969.5	6,849.6	10,211.0	4,499.2	14,710.1
White birch	2,641.4	6,742.7	592.2	9,976.3	756.0	151.7	294.8	450.7	3,798.0	5,451.3	11,037.3	4,390.3	15,427.6
Yellow birch	406.5	165.1	57.3	628.9	58.1	0.6	42.1	142.3	329.7	572.9	814.8	387.0	1,201.8
Hickory	40.4	6.5	6.1	53.0	1.1	*	1.6	6.9	26.2	35.8	56.5	32.3	88.8
Hackberry	10.8	1.3	1.7	13.8	0.1	--	0.3	1.6	6.7	8.7	14.2	8.4	22.6
Beech	6.8	4.4	0.9	12.1	1.7	*	1.0	3.7	6.9	13.3	17.7	7.7	25.4
Ash	1,236.1	768.3	158.7	2,163.1	274.8	7.9	163.5	580.5	1,158.1	2,184.8	3,031.1	1,316.8	4,347.9
Butternut	5.8	0.7	0.9	7.4	0.1	--	0.2	0.8	3.6	4.7	7.6	4.5	12.2
Black walnut	0.1	*	*	0.2	*	--	*	*	0.1	0.1	0.2	0.1	0.3
Cottonwood	7.7	19.2	0.5	27.3	4.3	1.1	1.2	2.9	4.9	14.4	36.4	5.4	41.8
Balsam poplar	11.4	10.8	1.4	23.5	3.6	0.3	2.0	5.9	10.5	22.3	34.0	11.9	45.8
Aspen	30,364.4	15,773.5	2,958.6	49,096.6	1,291.3	32.2	2,523.0	777.1	17,921.9	22,545.6	50,761.7	20,880.5	71,642.2
Black cherry	18.7	2.0	3.0	23.7	0.2	*	0.8	2.4	10.9	14.2	24.1	13.9	38.0
Red oak	5,171.8	997.0	725.3	6,894.1	259.1	16.1	294.4	77.8	2,719.5	3,366.9	6,816.3	3,444.8	10,261.1
White oak	797.5	203.8	108.8	1,110.1	52.5	1.9	74.9	11.4	464.3	605.0	1,142.0	573.1	1,715.1
Basswood	2,168.4	666.9	317.5	3,152.8	155.1	15.0	125.9	454.1	1,452.3	2,202.2	3,585.2	1,769.7	5,355.0
Elm	182.7	161.0	20.9	364.6	62.1	1.4	34.7	120.6	205.7	424.5	562.5	226.6	789.1
Other hardwoods	56.7	78.0	5.5	140.1	24.2	2.5	11.0	35.5	58.8	132.0	207.9	64.3	272.2
Total	51,629.2	30,485.6	5,945.1	88,059.9	4,311.2	358.4	4,756.8	4,432.1	35,145.8	49,004.4	95,973.3	41,090.9	137,064.3
All species	67,810.9	42,596.7	6,793.5	117,201.1	5,598.6	1,076.4	5,076.6	6,256.9	45,118.3	63,126.7	128,416.1	51,911.8	180,327.9

(Table 19 continued on next page)

(Table 19 continued)

CENTRAL UNIT

	Growing stock				Non-growing stock								
	Used for products				Used for products								
Species group	Sawtimber	Pole-timber	Logging residue (not used)	Total growing stock	Limbwood	Saplings	Cull trees	Dead trees	Logging slash (not used)	Total non-growing stock	Total material used for products	Total material not used	Total material harvested
Softwoods													
Balsam fir	19.9	17.0	0.9	37.8	1.5	0.9	0.3	1.3	15.4	19.3	40.8	16.3	57.1
Tamarack	21.9	18.7	1.0	41.6	1.6	0.9	0.3	1.4	16.9	21.2	44.8	17.9	62.8
Spruce	33.6	29.8	1.5	64.9	2.6	1.5	0.4	2.3	26.4	33.3	70.3	27.9	98.2
Jack pine	2,448.5	4,734.0	155.0	7,337.5	421.7	272.4	90.9	1,100.9	2,600.5	4,486.3	9,068.3	2,755.5	11,823.7
Red pine	5,990.3	4,659.1	201.0	10,850.3	589.2	387.3	268.3	114.8	2,672.0	4,031.6	12,009.0	2,872.9	14,881.9
White pine	2,337.2	704.2	109.4	3,150.9	98.4	51.8	38.5	25.1	959.2	1,172.9	3,255.2	1,068.7	4,323.8
N. white-cedar	10.4	1.9	0.9	13.3	0.2	*	*	--	4.9	5.1	12.6	5.7	18.4
Hemlock	64.8	54.0	2.0	120.8	6.8	4.5	3.1	1.3	29.3	45.1	134.6	31.3	165.8
Total	10,926.6	10,218.7	471.7	21,617.1	1,122.0	719.3	401.8	1,247.1	6,324.5	9,814.7	24,635.5	6,796.2	31,431.7
Hardwoods													
Soft maple	2,177.9	1,150.1	306.8	3,634.7	239.3	41.4	289.0	211.6	1,708.7	2,490.0	4,109.3	2,015.4	6,124.7
Hard maple	2,204.7	901.9	230.4	3,337.0	326.3	7.0	230.5	620.0	1,695.6	2,879.3	4,290.3	1,926.0	6,216.3
White birch	434.2	1,425.3	107.1	1,966.6	159.3	31.8	57.3	80.5	740.3	1,069.2	2,188.3	847.4	3,035.8
River birch	*	--	*	0.1	*	--	*	--	*	*	0.1	*	0.1
Yellow birch	106.1	58.2	14.0	178.3	21.8	0.2	13.8	48.7	98.5	183.1	248.9	112.5	361.5
Hickory	140.9	28.0	21.1	190.0	6.3	0.1	6.9	28.3	95.4	137.0	210.5	116.6	327.1
Hackberry	0.7	0.1	0.1	0.9	*	--	*	0.1	0.4	0.6	0.9	0.5	1.4
Beech	14.4	4.7	2.1	21.1	1.5	*	1.1	4.2	11.1	17.9	25.9	13.1	39.0
Ash	693.5	337.8	93.6	1,124.8	118.0	2.6	75.1	271.3	597.9	1,064.9	1,498.2	691.5	2,189.7
Butternut	6.1	0.7	0.9	7.8	0.1	--	0.2	0.9	3.8	4.9	8.0	4.7	12.7
Black walnut	1.6	0.1	0.3	2.0	*	--	0.1	0.1	0.6	0.8	1.9	0.9	2.8
Cottonwood	17.1	9.9	2.3	29.3	1.9	0.5	0.9	2.9	10.3	16.4	33.1	12.7	45.8
Balsam poplar	2.3	1.5	0.3	4.1	0.4	*	0.2	0.8	1.9	3.5	5.4	2.2	7.6
Aspen	9,742.9	5,019.4	888.1	15,650.3	415.1	17.6	744.2	244.8	5,728.3	7,150.0	16,183.8	6,616.4	22,800.2
Black cherry	38.4	3.7	6.2	48.3	0.3	--	1.8	4.4	21.3	27.8	48.6	27.4	76.1
Red oak	8,892.8	1,963.4	1,220.8	12,077.1	520.8	18.7	663.9	132.4	4,994.7	6,330.5	12,192.1	6,215.5	18,407.6
White oak	2,514.5	497.2	351.2	3,362.9	132.0	3.9	178.2	36.1	1,377.5	1,727.9	3,362.0	1,728.7	5,090.7
Basswood	763.9	196.2	114.8	1,075.0	42.9	3.4	40.0	149.6	502.3	738.0	1,195.9	617.1	1,813.0
Elm	164.3	120.2	20.1	304.5	45.7	0.9	26.5	93.3	170.4	336.8	450.8	190.4	641.3
Other hardwoods	27.8	32.3	2.9	63.0	11.1	0.7	5.5	18.6	30.8	66.8	96.1	33.7	129.8
Total	27,944.4	11,750.5	3,382.9	43,077.8	2,042.7	128.9	2,335.2	1,948.4	17,790.0	24,245.3	46,150.2	21,172.9	67,323.1
All species	38,871.0	21,969.2	3,854.6	64,694.8	3,164.7	848.3	2,737.0	3,195.5	24,114.4	34,060.0	70,785.7	27,969.1	98,754.8

SOUTHWEST UNIT

Species group	Growing stock: Used for products: Sawtimber	Growing stock: Used for products: Pole-timber	Growing stock: Logging residue (not used)	Total growing stock	Non-growing stock: Used for products: Limbwood	Non-growing stock: Used for products: Saplings	Non-growing stock: Used for products: Cull trees	Non-growing stock: Used for products: Dead trees	Non-growing stock: Logging slash (not used)	Total non-growing stock	Total material used for products	Total material not used	Total material harvested
Softwoods													
Balsam fir	0.1	0.1	*	0.2	*	*	*	*	0.1	0.1	0.2	0.1	0.3
Eastern redcedar	5.0	0.6	0.4	6.0	0.1	--	*	--	2.4	2.5	5.7	2.7	8.5
Tamarack	0.2	0.2	*	0.5	*	*	*	*	0.2	0.2	0.5	0.2	0.7
Spruce	33.0	24.6	1.7	59.3	2.2	1.2	0.4	1.8	24.0	29.6	63.2	25.7	88.9
Jack pine	148.0	263.2	9.5	420.7	23.5	15.1	5.0	60.8	149.7	254.1	515.6	159.2	674.8
Red pine	1,711.3	1,160.1	93.6	2,965.0	135.3	93.2	59.5	26.6	724.7	1,039.1	3,185.8	818.3	4,004.1
White pine	471.5	175.3	20.8	667.6	23.8	13.4	9.7	5.7	196.4	249.0	699.4	217.2	916.6
Total	2,369.1	1,624.0	126.0	4,119.2	184.9	122.9	74.5	94.9	1,097.4	1,574.6	4,470.4	1,223.4	5,693.8
Hardwoods													
Soft maple	817.7	159.3	138.1	1,115.1	18.4	2.1	35.9	103.2	489.4	648.9	1,136.5	627.5	1,764.0
Hard maple	1,983.4	183.2	198.5	2,365.1	31.3	0.2	88.8	60.0	1,057.4	1,237.7	2,346.9	1,256.0	3,602.8
White birch	138.3	179.2	29.1	346.6	19.1	3.5	9.7	19.6	134.3	186.1	369.4	163.4	532.7
River birch	0.1	--	*	0.2	*	--	*	--	*	0.1	0.2	0.1	0.2
Yellow birch	4.0	2.3	0.5	6.8	0.9	*	0.6	1.9	3.7	7.1	9.6	4.3	13.9
Hickory	262.7	32.0	40.5	335.1	2.5	--	8.4	37.7	162.7	211.3	343.2	203.2	546.4
Hackberry	20.9	2.6	3.2	26.6	0.2	--	0.7	3.0	13.0	16.8	27.3	16.2	43.5
Beech	*	*	*	*	*	*	*	*	*	0.1	0.1	*	0.1
Ash	477.6	77.6	72.5	627.6	13.3	0.1	19.4	83.1	310.6	426.6	671.0	383.1	1,054.1
Butternut	20.0	2.4	3.1	25.5	0.2	--	0.6	2.9	12.4	16.1	26.1	15.5	41.6
Black walnut	132.9	16.3	20.5	169.7	1.3	--	4.2	19.2	82.6	107.2	173.8	103.0	276.9
Cottonwood	161.0	25.9	30.2	217.1	1.4	*	4.3	19.9	85.8	111.4	212.5	116.0	328.6
Balsam poplar	3.3	0.5	0.5	4.3	0.1	*	0.1	0.6	2.1	2.9	4.6	2.6	7.2
Aspen	2,598.1	865.7	281.4	3,745.2	40.7	--	114.5	42.7	1,490.2	1,688.1	3,661.7	1,771.6	5,433.3
Black cherry	159.6	17.4	25.1	202.1	1.5	*	6.5	20.4	93.3	121.7	205.3	118.5	323.8
Red oak	9,386.0	865.8	1,341.3	11,593.1	241.9	0.9	178.7	146.9	4,665.5	5,234.0	10,820.3	6,006.8	16,827.1
White oak	3,139.0	279.0	450.4	3,868.4	80.8	0.2	58.7	48.4	1,540.7	1,728.9	3,606.1	1,991.2	5,597.3
Willow	9.3	1.1	1.4	11.9	0.1	--	0.3	1.3	5.8	7.5	12.2	7.2	19.4
Basswood	939.6	122.1	144.8	1,206.4	13.4	0.1	33.6	139.6	583.6	770.3	1,248.3	728.4	1,976.7
Elm	226.6	28.6	34.8	289.9	2.6	*	7.3	33.3	141.4	184.6	298.4	176.2	474.5
Other hardwoods	6.5	5.8	0.7	13.1	2.4	*	1.3	4.7	7.8	16.2	20.8	8.5	29.3
Total	20,486.7	2,866.6	2,816.8	26,170.1	471.9	7.1	573.6	788.4	10,882.5	12,723.6	25,194.4	13,699.3	38,893.6
All species	22,855.8	4,490.7	2,942.8	30,289.3	656.9	130.0	648.2	883.4	11,979.8	14,298.2	29,664.8	14,922.7	44,587.4

(Table 19 continued on next page)

(Table 19 continued)

SOUTHEAST UNIT

	Growing stock				Non-growing stock								
	Used for products				Used for products								
Species group	Sawtimber	Pole-timber	Logging residue (not used)	Total growing stock	Limbwood	Saplings	Cull trees	Dead trees	Logging slash (not used)	Total non-growing stock	Total material used for products	Total material not used	Total material harvested
Softwoods													
Balsam fir	7.4	6.6	0.3	14.3	0.6	0.3	0.1	0.5	5.8	7.4	15.5	6.2	21.7
Tamarack	4.6	2.4	0.3	7.2	0.2	0.1	*	0.2	2.9	3.4	7.5	3.2	10.7
Spruce	52.6	43.6	2.5	98.7	3.8	2.2	0.6	3.3	40.1	50.0	106.2	42.6	148.8
Jack pine	24.3	45.1	1.6	70.9	4.0	2.6	0.9	10.5	25.2	43.1	87.3	26.7	114.0
Red pine	558.1	500.9	16.0	1,075.0	63.1	42.1	29.1	12.0	254.8	401.1	1,205.3	270.8	1,476.1
White pine	444.5	180.9	19.2	644.5	24.3	14.1	10.1	5.6	186.3	240.4	679.4	205.5	884.9
N. white-cedar	130.4	39.8	13.6	183.8	3.2	1.9	0.5	--	59.0	64.5	175.7	72.7	248.4
Hemlock	33.4	4.3	1.7	39.4	0.7	0.2	0.2	0.3	13.3	14.7	39.1	15.0	54.1
Total	1,255.3	823.5	55.2	2,134.0	100.0	63.5	41.5	32.3	587.4	824.7	2,316.0	642.6	2,958.7
Hardwoods													
Soft maple	623.3	106.1	95.0	824.4	13.3	1.4	27.5	86.1	399.5	527.8	857.7	494.5	1,352.2
Hard maple	573.5	54.8	62.7	691.1	11.3	0.1	30.9	21.9	298.2	362.4	692.6	360.9	1,053.5
White birch	85.3	69.1	16.1	170.6	7.5	1.4	7.2	8.5	65.1	89.7	179.0	81.2	260.3
River birch	*	--	*	*	*	--	*	--	*	*	*	*	*
Yellow birch	12.1	6.9	1.6	20.5	2.6	*	1.6	5.8	11.4	21.4	29.0	13.0	42.0
Hickory	51.3	6.3	7.9	65.5	0.5	--	1.6	7.4	31.9	41.4	67.1	39.8	106.9
Hackberry	4.3	0.5	0.7	5.4	*	--	0.1	0.6	2.6	3.4	5.6	3.3	8.9
Beech	55.6	6.4	8.7	70.7	0.5	--	2.0	7.6	33.6	43.6	72.1	42.2	114.3
Ash	298.5	40.0	46.6	385.1	6.1	*	13.7	43.9	180.4	244.0	402.2	227.0	629.2
Butternut	11.3	1.4	1.7	14.4	0.1	--	0.4	1.6	7.0	9.1	14.7	8.7	23.5
Black walnut	20.1	2.5	3.1	25.7	0.2	--	0.6	2.9	12.5	16.2	26.3	15.6	41.9
Cottonwood	76.7	9.2	11.9	97.7	0.7	*	2.6	10.8	47.0	61.1	100.0	58.8	158.8
Balsam poplar	28.6	20.9	3.5	53.0	8.2	0.1	4.8	17.0	30.6	60.8	79.7	34.0	113.7
Aspen	746.6	330.4	82.9	1,159.9	16.8	--	50.3	16.4	432.6	516.1	1,160.6	515.4	1,676.0
Black cherry	62.9	7.5	9.7	80.1	0.6	*	2.1	8.8	38.4	50.0	81.9	48.2	130.1
Red oak	1,364.2	138.0	197.0	1,699.1	38.2	0.4	40.3	20.2	675.3	774.4	1,601.3	872.2	2,473.5
White oak	832.7	79.1	119.6	1,031.4	22.1	0.1	19.6	12.7	412.5	467.0	966.4	532.1	1,498.4
Willow	6.8	0.8	1.0	8.7	0.1	--	0.2	1.0	4.2	5.5	8.9	5.3	14.1
Basswood	230.1	29.9	36.4	296.4	5.0	*	12.0	32.3	134.7	184.0	309.3	171.1	480.3
Elm	54.4	6.6	8.4	69.4	0.6	*	1.9	7.7	33.4	43.6	71.2	41.8	113.0
Other hardwoods	0.7	0.4	0.1	1.3	0.2	*	0.1	0.4	0.7	1.3	1.8	0.8	2.6
Total	5,138.9	916.8	714.6	6,770.3	134.7	3.6	219.7	313.5	2,851.4	3,522.9	6,727.2	3,566.0	10,293.1
All species	6,394.2	1,740.2	769.8	8,904.3	234.7	67.0	261.2	345.8	3,438.8	4,347.5	9,043.2	4,208.6	13,251.8

* *= Less than 50 cubic feet.*

[1] *Based on factors obtained from the Wisconsin Utilization Study of 1983 and other regional utilization studies.*

Rows and columns may not sum due to rounding.

Table 20.--*Growing-stock removals from timberland for industrial roundwood by Forest Survey Unit, county, and species group, Wisconsin, 1996*

(In thousand cubic feet)

Forest Survey Unit and county	Balsam fir	E. red-cedar	Tama-rack	Spruce	Jack pine	Red pine	White pine	N. white-cedar	Hemlock	Total softwoods	Soft maple	Hard maple	White birch	River birch	Yellow birch	Hickory	Hack-berry
Northeast																	
Florence	174	--	9	100	430	463	35	3	321	1,535	292	1,111	771	--	188	--	--
Forest	551	--	12	252	134	778	122	20	311	2,182	717	1,809	1,204	--	245	1	--
Langlade	627	--	24	160	52	319	54	2	95	1,332	896	1,982	1,157	--	156	3	--
Lincoln	308	--	52	116	155	565	160	1	36	1,392	871	1,033	896	--	91	*	--
Marinette	244	--	25	141	1,394	1,729	233	205	94	4,064	690	921	959	--	191	5	--
Menominee	154	--	20	69	291	503	451	174	1,080	2,743	673	1,292	207	--	68	18	--
Oconto	37	--	3	83	243	526	113	112	29	1,146	223	282	591	--	63	*	--
Oneida	675	--	197	262	451	1,628	495	3	50	3,761	609	937	1,850	--	119	--	--
Shawano	17	--	19	10	31	253	132	130	73	665	484	1,150	204	--	48	11	--
Vilas	350	--	9	108	2,198	1,457	416	4	21	4,564	416	803	1,942	--	102	--	--
Total	3,138	--	370	1,301	5,379	8,220	2,212	655	2,110	23,384	5,873	11,321	9,781	--	1,270	38	--
Northwest																	
Ashland	267	--	23	213	100	353	225	2	17	1,201	557	930	679	--	120	4	--
Barron	1	--	*	19	23	137	137	--	--	317	123	167	153	--	4	4	1
Bayfield	304	--	2	129	3,728	1,907	691	*	12	6,773	559	653	1,623	--	37	--	--
Burnett	2	--	11	33	1,882	1,107	186	--	--	3,220	110	111	222	--	7	--	--
Douglas	1,682	--	20	352	3,019	1,694	175	*	--	6,942	324	403	1,404	--	11	--	--
Iron	566	--	11	195	114	174	95	*	45	1,199	614	930	958	--	134	--	--
Polk	1	--	2	2	774	263	15	--	2	1,059	151	92	171	--	4	--	--
Price	321	--	156	241	610	835	110	2	12	2,287	915	1,044	994	--	82	--	--
Rusk	21	--	13	35	12	175	41	--	2	300	727	1,011	676	--	49	41	11
Sawyer	257	--	16	191	210	758	260	--	15	1,706	1,148	1,526	2,042	--	110	2	--
Taylor	178	--	27	29	12	139	54	--	92	532	970	766	582	--	49	2	--
Washburn	104	--	62	21	2,219	1,093	104	*	1	3,605	311	227	471	--	22	--	3
Total	3,705	--	344	1,458	12,703	8,634	2,093	6	198	29,141	6,512	7,860	9,976	--	629	53	14
Central																	
Adams	1	--	*	1	1,865	2,392	506	--	--	4,766	32	28	28	*	*	2	--
Chippewa	3	--	12	1	3	465	154	--	7	646	279	173	194	--	10	2	*
Clark	*	--	5	2	380	312	345	--	7	1,050	704	524	615	--	32	67	--
Eau Claire	--	--	--	1	287	506	64	--	--	859	154	156	142	--	6	3	--
Jackson	9	--	2	12	1,604	886	438	--	3	2,954	579	386	282	*	9	63	--
Juneau	--	--	--	0	1,413	1,040	285	--	--	2,737	126	105	86	*	3	7	--
Marathon	22	--	--	14	86	390	166	*	63	742	820	1,239	278	--	92	15	--
Marquette	--	--	--	--	46	643	109	1	--	799	15	14	13	--	1	--	--
Monroe	--	--	7	--	738	403	159	--	--	1,308	130	134	61	--	1	20	1
Portage	3	--	12	11	478	1,350	238	--	27	2,119	244	110	90	--	9	3	--
Waupaca	--	--	1	2	14	472	267	12	12	778	366	279	73	--	9	4	--
Waushara	*	--	1	3	71	1,589	228	*	1	1,893	45	64	25	--	1	--	--
Wood	--	--	--	17	351	404	190	--	1	963	142	124	80	--	5	5	--
Total	38	--	42	65	7,337	10,850	3,151	13	121	21,617	3,635	3,337	1,967	*	178	190	1

Southwest																	
Buffalo	–	–	–	4	1	68	26	–	–	100	105	86	52	*	1	48	4
Crawford	–	–	–	2	–	35	11	–	–	47	56	212	4	–	–	23	2
Dunn	–	–	–	11	95	1,013	160	–	–	1,279	258	222	104	*	4	9	1
Grant	–	–	–	–	1	240	26	–	–	267	66	208	3	*	*	30	11
Iowa	–	–	*	5	73	110	69	–	–	256	29	68	1	*	*	18	2
La Crosse	–	–	–	–	77	144	20	–	–	241	56	36	19	–	–	24	3
Lafayette	–	–	–	–	–	*	1	–	–	1	*	*	*	–	–	1	–
Pepin	–	1	–	11	10	66	41	–	–	129	82	58	22	–	*	12	–
Pierce	–	–	–	4	–	15	41	–	–	61	9	294	10	–	*	17	–
Richland	–	–	–	*	40	83	25	–	–	149	90	394	2	–	–	48	2
Sauk	*	2	–	3	109	424	117	–	–	655	178	186	35	*	1	47	1
St. Croix	–	3	–	18	11	159	32	–	–	223	51	62	36	–	*	3	–
Trempealeau	–	–	–	–	5	560	65	–	–	630	82	39	55	*	*	24	*
Vernon	–	–	–	–	1	47	33	–	–	81	52	501	4	–	–	33	*
Total	*	6	*	59	421	2,965	668	–	–	4,119	1,115	2,365	347	*	7	335	27
Southeast																	
Brown	–	–	–	2	2	99	29	24	9	165	42	62	10	–	*	2	–
Calumet	–	–	–	1	–	–	39	6	–	45	42	19	*	–	–	*	–
Columbia	2	–	–	10	34	342	45	–	–	433	14	24	6	*	*	7	1
Dane	–	–	–	1	1	12	16	1	–	32	14	25	2	–	–	11	1
Dodge	–	–	–	–	–	*	2	2	*	4	29	26	–	–	–	7	*
Door	8	–	–	28	*	42	66	29	9	182	13	36	105	–	14	2	–
Fond Du Lac	–	–	–	*	–	4	12	–	–	16	44	14	2	–	*	1	*
Green	–	–	–	–	2	18	8	–	–	27	8	40	–	–	–	8	–
Green Lake	–	–	–	4	4	103	43	*	–	154	16	11	1	–	*	4	–
Jefferson	–	–	–	1	1	43	52	1	–	98	35	20	*	–	*	5	–
Kenosha	–	–	–	–	–	–	2	–	–	2	–	–	–	–	–	2	–
Kewaunee	–	–	3	3	–	7	14	36	9	71	60	21	5	–	*	2	–
Manitowoc	1	–	–	8	15	74	64	34	7	202	157	100	5	–	1	5	*
Milwaukee	–	–	–	–	–	1	–	–	1	2	–	–	–	–	–	–	–
Outagamie	–	–	–	8	–	73	47	44	3	173	116	42	26	–	3	6	–
Ozaukee	–	–	–	–	–	–	3	1	–	4	56	5	–	–	–	–	1
Racine	–	–	–	15	7	–	12	–	–	35	*	*	*	–	*	–	–
Rock	1	–	–	3	2	81	20	*	–	107	*	1	–	–	–	–	*
Sheboygan	2	–	–	2	–	25	13	6	–	49	51	146	5	–	1	2	*
Walworth	–	–	5	3	–	95	51	–	–	153	–	–	–	–	–	–	–
Washington	–	–	–	5	–	3	17	*	2	26	46	49	1	–	*	1	2
Waukesha	–	–	–	7	2	35	31	*	–	74	11	11	*	–	*	*	*
Winnebago	–	–	–	–	–	19	62	–	–	80	68	38	1	–	–	1	*
Total	14	–	7	99	71	1,075	644	184	39	2,134	824	691	171	*	21	65	5
State total	6,895	6	764	2,982	25,910	31,745	8,768	858	2,468	80,395	17,958	25,575	22,241	*	2,104	682	47

(Table 20 continued on next page)

(Table 20 continued)

Forest Survey Unit and county	Beech	Ash	Butter-nut	Black walnut	Cotton-wood	Balsam poplar	Aspen	Black cherry	Red oak	White oak	Willow	Bass-wood	Elm	Other hardwoods	Total hardwoods	All species
Northeast																
Florence	1	125	--	--	1	85	2,945	2	260	16	--	433	12	6	6,248	7,784
Forest	6	293	2	--	1	49	5,166	13	415	57	--	881	149	8	11,016	13,197
Langlade	6	330	2	1	2	9	5,019	14	533	77	--	865	109	10	11,169	12,502
Lincoln	8	366	2	--	5	5	5,439	2	456	43	--	447	239	44	9,949	11,340
Marinette	18	314	--	1	5	135	7,542	15	1,497	92	--	384	7	5	12,780	16,845
Menominee	91	138	3	--	*	16	4,106	8	1,310	597	--	542	123	5	9,198	11,940
Oconto	11	87	*	--	6	20	2,592	--	461	47	--	139	19	3	4,545	5,691
Oneida	1	334	1	--	11	20	4,126	4	619	59	--	650	26	80	9,446	13,207
Shawano	33	166	2	1	2	1	1,331	16	691	36	--	258	72	1	4,509	5,174
Vilas	*	233	--	--	3	10	3,044	1	473	47	--	242	12	54	7,382	11,946
Total	176	2,386	11	3	37	351	41,309	75	6,714	1,073	--	4,841	768	216	86,241	109,625
Northwest																
Ashland	*	177	--	--	*	2	2,996	2	506	41	--	196	12	6	6,226	7,427
Barron	--	62	1	*	*	3	2,334	1	743	175	--	174	3	4	3,953	4,269
Bayfield	--	191	1	--	1	1	5,627	--	958	70	--	83	8	14	9,827	16,599
Burnett	--	38	*	--	*	*	2,674	*	211	64	--	23	2	5	3,468	6,688
Douglas	--	59	--	--	*	7	5,130	--	193	17	--	317	2	3	7,870	14,812
Iron	4	257	*	--	3	3	5,747	11	375	31	--	340	124	34	9,565	10,764
Polk	1	44	1	--	*	*	1,954	*	388	163	--	45	3	3	3,021	4,080
Price	1	338	--	--	4	4	4,846	2	443	82	--	438	38	36	9,269	11,556
Rusk	1	307	2	--	14	1	3,683	1	1,180	198	--	489	39	9	8,440	8,739
Sawyer	1	334	1	--	*	*	6,201	4	1,135	125	--	568	35	10	13,244	14,950
Taylor	3	278	*	--	3	1	3,281	2	380	83	--	442	93	12	6,947	7,479
Washburn	1	78	1	--	*	*	4,624	1	383	62	--	36	7	5	6,232	9,837
Total	12	2,163	7	*	27	24	49,097	24	6,894	1,110	--	3,153	365	140	88,060	117,201
Central																
Adams	--	17	*	--	*	*	586	1	765	144	--	11	3	3	1,622	6,388
Chippewa	--	104	1	--	7	*	1,892	4	756	250	--	115	9	4	3,801	4,447
Clark	1	209	*	--	3	1	4,313	*	1,161	574	--	105	40	16	8,365	9,416
Eau Claire	*	54	*	--	1	*	992	3	750	210	--	19	5	6	2,500	3,360
Jackson	--	125	--	--	8	*	1,365	10	2,720	606	--	62	9	12	6,236	9,190
Juneau	--	47	1	--	*	1	281	7	1,515	418	--	62	11	4	2,673	5,411
Marathon	9	311	2	1	1	1	2,394	7	691	159	--	406	161	4	6,590	7,332
Marquette	--	7	--	--	*	*	72	--	97	66	--	4	*	1	290	1,089
Monroe	--	53	1	--	2	*	457	15	1,698	463	--	53	23	5	3,118	4,426
Portage	*	51	--	--	*	*	856	--	458	107	--	28	14	1	1,972	4,091
Waupaca	10	87	2	1	7	1	585	*	631	158	--	153	26	5	2,399	3,178
Waushara	--	20	--	--	*	*	136	--	380	112	--	28	1	1	814	2,707
Wood	--	38	*	--	*	*	1,721	1	454	94	--	29	2	1	2,696	3,660
Total	21	1,125	8	2	29	4	15,650	48	12,077	3,363	--	1,075	304	63	43,078	64,695

Southwest																
Buffalo	–	27	–	*	88	1	648	33	1,922	381	*	80	18	1	3,494	3,594
Crawford	–	49	2	40	2	*	29	10	820	302	–	91	23	*	1,664	1,711
Dunn	*	107	3	–	10	1	690	16	691	349	–	94	13	3	2,576	3,855
Grant	–	82	5	57	52	–	48	16	1,034	393	9	136	49	*	2,201	2,468
Iowa	–	36	2	45	–	–	41	11	565	281	–	67	13	–	1,180	1,436
La Crosse	–	35	1	3	5	–	69	14	1,226	345	–	80	33	1	1,950	2,191
Lafayette	–	3	–	3	–	–	–	3	24	37	–	5	1	–	77	78
Pepin	–	33	–	–	4	*	253	2	254	103	–	51	4	2	882	1,011
Pierce	–	26	*	1	21	*	127	1	313	94	–	113	10	*	1,035	1,096
Richland	–	77	5	13	–	1	161	11	1,001	301	–	142	44	–	2,289	2,438
Sauk	–	70	6	3	*	1	547	36	1,382	413	–	117	34	2	3,060	3,716
St. Croix	–	13	*	–	2	–	614	*	215	54	–	41	3	*	1,094	1,317
Trempealeau	–	16	–	*	33	1	479	28	1,080	300	2	43	10	3	2,194	2,824
Vernon	–	54	1	4	–	–	41	21	1,066	514	1	147	35	*	2,474	2,555
Total	*	628	25	170	217	4	3,745	202	11,593	3,868	12	1,206	290	13	26,170	30,289
Southeast																
Brown	6	31	–	–	31	45	635	4	68	38	–	30	2	*	1,006	1,171
Calumet	–	14	*	–	6	–	1	*	23	8	–	7	1	*	122	167
Columbia	–	5	2	1	*	–	62	3	404	145	–	20	1	*	694	1,128
Dane	–	9	7	3	1	–	27	18	305	220	–	31	8	*	682	713
Dodge	1	15	1	1	–	–	7	16	66	113	1	24	8	–	315	319
Door	6	18	2	–	3	–	74	1	15	–	–	12	2	*	302	484
Fond Du Lac	1	17	*	*	4	–	12	*	29	20	–	3	2	–	149	165
Green	–	18	–	16	–	–	5	3	140	70	–	19	23	–	349	377
Green Lake	–	6	–	–	*	*	41	3	50	53	–	4	*	*	191	345
Jefferson	*	17	–	1	–	–	2	14	59	102	2	19	7	–	284	382
Kenosha	–	–	–	*	–	–	–	*	2	7	–	–	–	–	12	13
Kewaunee	9	23	–	–	7	3	8	–	14	7	1	10	2	–	171	242
Manitowoc	19	58	–	–	11	2	30	2	109	33	–	27	3	–	561	763
Milwaukee	–	*	–	*	–	–	–	–	1	–	–	–	–	–	1	3
Outagamie	6	26	–	–	19	1	113	3	28	23	2	10	6	*	430	603
Ozaukee	2	7	–	–	6	–	–	*	20	2	–	5	–	–	104	107
Racine	–	*	–	–	–	–	–	–	7	3	2	–	–	–	14	48
Rock	–	3	1	2	*	–	–	4	14	39	–	1	2	–	68	175
Sheboygan	20	76	2	–	8	2	48	6	148	62	–	48	3	*	627	676
Walworth	–	4	–	–	*	–	–	1	6	12	–	1	–	–	24	178
Washington	1	17	*	–	*	–	4	*	32	11	1	10	1	*	177	203
Waukesha	–	9	–	1	–	–	1	1	24	18	1	4	*	–	81	156
Winnebago	–	13	*	–	–	–	92	1	135	45	–	13	–	–	406	487
Total	71	385	14	26	98	53	1,160	80	1,699	1,031	9	296	69	1	6,770	8,904
State total	280	6,686	67	201	408	436	110,961	429	38,978	10,445	21	10,571	1,797	433	250,319	330,715

* *= Less than 500 cubic feet.*

Rows and columns may not sum do to rounding.

Table 21.--*Sawtimber removals from timberland for industrial roundwood by Forest Survey Unit, county, and species group, Wisconsin, 1996*

(In thousand board feet) [1]

Forest Survey Unit and county	Balsam fir	E. red-cedar	Tama-rack	Spruce	Jack pine	Red pine	White pine	N. white-cedar	Hemlock	Total softwoods	Soft maple	Hard maple	White birch	River birch	Yellow birch	Hickory	Hack-berry
Northeast																	
Florence	284	--	17	172	618	1,056	129	5	886	3,166	691	4,914	1,137	--	623	--	--
Forest	960	--	27	501	309	2,956	562	79	1,018	6,412	1,788	7,626	2,306	--	838	4	--
Langlade	999	--	40	256	98	1,007	199	8	190	2,797	2,453	8,286	1,900	--	462	12	--
Lincoln	522	--	82	199	210	2,118	727	2	71	3,931	2,316	3,073	924	--	178	1	--
Marinette	444	--	48	320	1,981	5,404	980	423	369	9,968	2,726	4,107	2,188	--	630	25	--
Menominee	245	--	32	127	357	1,093	2,000	288	3,413	7,555	1,588	5,243	360	--	127	87	--
Oconto	64	--	12	228	298	1,362	526	266	57	2,813	692	960	1,303	--	105	1	--
Oneida	1,129	--	311	425	792	6,126	2,158	13	127	11,081	1,367	2,282	2,842	--	229	--	--
Shawano	27	--	31	16	106	580	670	461	208	2,100	1,664	5,540	377	--	171	54	--
Vilas	670	--	15	221	4,063	4,598	1,730	20	41	11,357	860	2,290	3,132	--	192	--	--
Total	5,343	--	613	2,465	8,833	26,301	9,681	1,565	6,380	61,181	16,145	44,321	16,468	--	3,556	183	--
Northwest																	
Ashland	429	--	38	370	279	1,391	1,001	10	36	3,554	1,598	3,689	1,203	--	497	6	--
Barron	2	--	1	29	30	406	658	--	--	1,125	382	646	277	--	15	17	3
Bayfield	501	--	4	302	7,058	8,626	3,561	1	25	20,076	1,233	1,616	2,408	--	96	--	--
Burnett	6	--	17	52	3,778	3,402	959	--	--	8,216	240	219	372	--	11	--	--
Douglas	2,955	--	32	641	4,893	5,090	802	1	--	14,413	635	745	1,656	--	22	--	--
Iron	1,007	--	17	406	352	596	429	*	89	2,896	1,494	2,848	1,244	--	409	--	--
Polk	2	--	3	3	949	773	49	--	3	1,782	424	269	188	--	7	--	--
Price	543	--	260	528	1,723	3,750	450	8	27	7,289	2,728	3,339	1,020	--	287	--	--
Rusk	33	--	21	56	15	663	175	--	4	967	2,110	3,685	744	--	141	198	51
Sawyer	410	--	27	307	404	2,469	1,187	--	33	4,837	3,052	5,395	2,538	--	375	12	--
Taylor	285	--	43	45	45	504	270	--	179	1,370	3,711	2,801	687	--	130	9	--
Washburn	165	--	97	38	3,532	3,170	425	2	2	7,432	672	463	492	--	80	--	13
Total	6,337	--	560	2,777	23,056	30,840	9,967	22	398	73,958	18,279	25,715	12,829	--	2,069	242	66
Central																	
Adams	2	--	1	1	2,392	5,376	2,112	--	--	9,884	88	54	22	*	1	8	--
Chippewa	4	--	20	2	4	1,926	820	--	14	2,789	1,081	575	302	--	25	9	1
Clark	*	--	8	3	523	737	1,608	--	13	2,892	2,031	1,102	420	--	60	234	--
Eau Claire	--	--	--	2	353	1,430	243	--	--	2,028	468	439	94	--	10	13	--
Jackson	14	--	3	18	2,040	2,344	1,786	--	6	6,213	1,684	729	183	*	15	304	--
Juneau	--	--	--	*	1,740	2,491	1,113	--	--	5,345	406	279	71	*	6	33	--
Marathon	38	--	--	23	108	958	728	1	150	2,007	2,849	5,423	366	--	314	72	--
Marquette	--	--	--	--	56	1,255	308	1	--	1,620	43	30	6	--	3	--	--
Monroe	--	--	12	--	904	1,026	508	--	--	2,450	441	474	38	--	2	98	3
Portage	4	--	19	18	595	3,314	986	--	52	4,988	938	311	176	--	19	13	--
Waupaca	--	--	5	3	24	1,063	1,309	48	36	2,488	1,558	1,246	175	--	20	19	--
Waushara	*	--	1	5	87	3,296	669	1	2	4,062	163	270	36	--	2	--	--
Wood	--	--	--	27	505	873	642	--	2	2,049	489	405	45	--	8	22	--
Total	63	--	69	103	9,332	26,089	12,834	52	273	48,815	12,239	11,339	1,936	*	483	824	4

Southwest																	
Buffalo	–	–	–	7	1	253	62	–	–	324	482	423	193	*	1	231	20
Crawford	–	–	–	3	–	68	25	–	–	95	271	1,144	13	–	–	109	10
Dunn	–	–	–	32	180	3,113	633	–	–	3,958	1,135	1,041	123	*	13	43	4
Grant	–	–	–	–	1	802	112	–	–	915	313	1,124	3	*	*	144	53
Iowa	–	–	1	8	89	252	326	–	–	675	137	367	2	*	*	85	12
La Crosse	–	–	–	–	94	275	55	–	–	424	256	170	55	–	–	116	14
Lafayette	–	–	–	–	–	3	5	–	–	7	*	*	*	–	–	3	–
Pepin	–	4	–	18	12	255	135	–	–	424	371	266	24	–	*	56	–
Pierce	–	–	–	10	–	36	181	–	–	228	39	1,582	20	–	1	80	–
Richland	–	–	–	1	49	164	72	–	–	285	432	2,136	7	–	–	232	8
Sauk	*	9	–	5	133	1,254	440	–	–	1,842	816	935	82	*	1	228	4
St. Croix	–	12	–	29	13	372	142	–	–	567	228	328	82	–	1	15	–
Trempealeau	–	–	–	–	6	1,263	154	–	–	1,423	364	146	170	*	*	113	2
Vernon	–	–	–	–	1	90	166	–	–	257	252	2,711	17	–	–	158	2
Total	*	25	1	113	578	8,199	2,508	–	–	11,424	5,097	12,374	792	1	18	1,613	128
Southeast																	
Brown	–	–	–	3	3	191	154	98	49	498	183	338	45	–	*	9	–
Calumet	–	–	–	3	–	–	212	25	–	240	203	101	*	–	–	2	–
Columbia	4	–	–	15	48	680	131	–	–	878	51	109	7	*	1	32	3
Dane	–	–	–	3	1	25	46	4	–	79	63	126	3	–	–	55	5
Dodge	–	–	–	–	–	2	10	7	2	22	141	142	–	–	–	34	*
Door	12	–	–	44	2	110	186	120	45	519	52	179	282	–	36	9	–
Fond Du Lac	–	–	–	1	–	10	57	–	–	68	208	70	1	–	*	5	1
Green	–	–	–	–	2	38	21	–	–	62	38	216	–	–	–	36	–
Green Lake	–	–	–	6	5	199	97	1	–	308	75	57	1	–	*	19	–
Jefferson	–	–	–	2	2	82	133	4	–	222	169	108	*	–	*	26	–
Kenosha	–	–	–	–	–	–	3	–	–	3	–	–	–	–	–	8	–
Kewaunee	–	–	11	11	–	17	71	147	48	304	285	115	22	–	*	9	–
Manitowoc	2	–	–	15	18	194	322	138	35	723	746	540	23	–	5	23	1
Milwaukee	–	–	–	–	–	2	–	–	2	4	–	–	–	–	–	–	–
Outagamie	–	–	–	12	–	159	194	72	12	449	462	133	90	–	4	27	–
Ozaukee	–	–	–	–	–	–	9	3	–	12	271	28	–	–	–	–	3
Racine	–	–	–	24	9	–	23	–	–	56	1	*	*	–	*	–	–
Rock	2	–	–	6	2	156	38	1	–	204	2	4	–	–	–	–	2
Sheboygan	3	–	–	4	–	50	61	27	–	145	245	797	28	–	6	10	2
Walworth	–	–	7	4	–	182	96	–	–	290	–	–	–	–	–	–	–
Washington	–	–	–	8	–	6	40	*	4	58	210	254	1	–	1	5	8
Waukesha	–	–	–	11	2	66	92	2	–	173	51	57	*	–	*	2	1
Winnebago	–	–	–	–	–	96	328	–	–	424	329	203	4	–	–	5	*
Total	23	–	18	169	94	2,264	2,326	649	197	5,740	3,786	3,578	508	*	54	315	26
State total	11,767	25	1,260	5,628	41,894	93,694	37,316	2,287	7,248	201,118	55,547	97,326	32,532	1	6,181	3,178	225

(Table 21 continued on next page)

(Table 21 continued)

Forest Survey Unit and county	Beech	Ash	Butter-nut	Black walnut	Cotton-wood	Balsam poplar	Aspen	Black cherry	Red oak	White oak	Willow	Bass-wood	Elm	Other hardwoods	Total hardwoods	All species
Northeast																
Florence	1	243	--	--	1	250	8,400	12	834	40	--	1,667	25	9	18,848	22,014
Forest	16	735	8	--	2	89	16,962	62	1,644	138	--	3,879	267	13	36,377	42,789
Langlade	20	835	8	4	4	18	14,773	66	2,286	193	--	3,715	184	15	35,235	38,033
Lincoln	13	882	7	--	8	8	13,810	9	1,305	117	--	1,195	391	58	24,295	28,226
Marinette	87	1,208	--	7	21	402	27,529	80	7,098	425	--	1,493	32	8	48,068	58,036
Menominee	402	269	14	--	*	27	10,466	30	5,089	2,989	--	2,568	206	9	29,474	37,029
Oconto	55	225	2	--	29	35	7,847	--	2,052	221	--	396	49	6	13,977	16,790
Oneida	1	556	4	--	12	30	11,144	19	1,527	137	--	1,050	42	87	21,328	32,410
Shawano	154	603	12	8	12	5	3,698	85	3,466	153	--	1,231	148	1	17,382	19,482
Vilas	1	342	--	--	4	15	8,524	3	1,140	112	--	398	20	58	17,090	28,448
Total	751	5,898	55	19	92	878	123,154	366	26,441	4,525	--	17,592	1,365	264	262,075	323,256
Northwest																
Ashland	2	443	--	--	*	3	7,483	9	2,343	94	--	848	24	9	18,251	21,805
Barron	--	223	4	1	1	17	6,682	4	3,639	860	--	801	12	7	13,590	14,714
Bayfield	--	350	6	--	1	2	14,023	--	4,279	171	--	241	19	16	24,462	44,538
Burnett	--	63	2	--	1	*	7,869	1	868	279	--	75	6	7	10,013	18,229
Douglas	--	98	--	--	*	12	12,058	--	873	47	--	1,502	3	5	17,657	32,070
Iron	7	474	1	--	4	4	13,503	50	919	74	--	813	206	45	22,094	24,991
Polk	5	125	3	--	1	*	5,094	2	1,901	811	--	190	9	5	9,036	10,818
Price	3	908	--	--	6	6	12,600	10	1,506	282	--	1,316	64	49	24,124	31,413
Rusk	1	966	10	--	13	1	12,388	5	5,669	869	--	2,076	63	14	29,004	29,971
Sawyer	3	808	6	--	1	1	17,372	23	5,348	405	--	2,606	71	16	38,030	42,867
Taylor	5	912	1	--	4	2	8,844	9	1,597	320	--	1,900	153	15	21,099	22,469
Washburn	3	163	3	--	*	*	13,260	3	1,804	272	--	128	12	8	17,378	24,810
Total	28	5,534	36	1	31	47	131,178	116	30,748	4,483	--	12,496	643	195	244,738	318,696
Central																
Adams	--	49	1	--	*	*	1,587	4	2,457	467	--	39	13	5	4,794	14,677
Chippewa	--	408	6	--	7	*	5,198	23	3,719	1,230	--	445	13	6	13,048	15,837
Clark	2	456	1	--	6	1	10,791	1	4,165	2,387	--	281	67	18	22,022	24,913
Eau Claire	*	129	2	--	4	*	2,761	15	3,113	874	--	54	15	10	8,002	10,030
Jackson	--	233	--	--	37	*	3,635	46	12,099	2,698	--	239	37	20	21,960	28,173
Juneau	--	135	3	--	*	4	762	35	5,610	1,721	--	268	50	7	9,390	14,735
Marathon	27	1,108	9	4	1	1	7,380	39	3,220	705	--	1,863	272	6	23,659	25,665
Marquette	--	21	--	--	*	*	286	--	415	332	--	9	*	2	1,149	2,769
Monroe	--	178	5	--	10	*	1,275	71	7,819	2,185	--	224	108	8	12,941	15,391
Portage	1	161	--	--	*	*	2,295	--	1,920	412	--	91	27	2	6,367	11,355
Waupaca	48	326	10	7	34	5	1,780	1	3,085	783	--	711	46	6	9,858	12,346
Waushara	--	73	--	--	*	*	447	--	1,770	513	--	124	1	2	3,402	7,464
Wood	--	107	1	--	*	*	4,206	5	1,830	356	--	128	7	2	7,610	9,660
Total	77	3,385	38	11	100	12	42,402	240	51,223	14,662	--	4,476	656	94	144,201	193,016

Southwest																
Buffalo	–	117	–	1	420	5	2,188	159	9,694	1,928	2	380	84	1	16,328	16,652
Crawford	–	236	11	192	8	*	125	50	4,138	1,548	–	433	110	*	8,397	8,493
Dunn	*	462	15	–	48	5	2,297	81	3,399	1,744	–	435	59	4	10,910	14,868
Grant	–	392	23	275	252	–	223	78	5,216	1,976	41	656	236	*	11,006	11,921
Iowa	–	170	11	218	–	–	143	54	2,836	1,407	–	323	63	–	5,829	6,504
La Crosse	–	158	4	15	26	–	257	65	6,178	1,757	–	382	161	2	9,617	10,041
Lafayette	–	12	–	15	–	–	–	14	123	186	–	26	3	–	381	388
Pepin	–	140	–	–	21	*	954	12	1,242	521	–	234	20	4	3,865	4,289
Pierce	–	122	1	3	101	*	445	3	1,581	478	–	540	48	1	5,043	5,271
Richland	–	368	22	61	–	3	760	54	5,054	1,517	–	682	209	–	11,546	11,830
Sauk	–	313	30	15	*	3	2,539	179	6,841	2,049	–	551	163	4	14,751	16,594
St. Croix	–	61	1	–	8	–	1,478	*	1,083	271	–	201	13	*	3,770	4,337
Trempealeau	–	51	–	2	157	5	1,764	136	5,400	1,535	9	193	49	5	10,099	11,523
Vernon	–	258	4	21	–	–	196	104	5,406	2,696	5	708	169	*	12,707	12,964
Total	*	2,859	123	816	1,041	20	13,369	989	58,191	19,613	57	5,742	1,387	21	124,251	135,675
Southeast																
Brown	29	142	–	–	147	73	1,457	19	365	201	–	120	9	*	3,137	3,635
Calumet	–	67	1	–	28	–	4	2	114	42	–	32	3	*	599	839
Columbia	–	17	8	5	2	–	278	13	1,936	684	–	100	6	*	3,250	4,128
Dane	–	43	35	12	5	–	130	87	1,530	1,106	–	151	39	1	3,393	3,472
Dodge	3	73	3	6	–	–	27	76	332	569	5	117	40	–	1,567	1,589
Door	30	84	8	–	16	–	185	5	71	–	–	51	7	*	1,014	1,533
Fond Du Lac	5	78	1	2	20	–	39	2	117	89	–	15	8	–	662	730
Green	–	87	–	78	–	–	24	15	704	354	–	90	109	–	1,752	1,814
Green Lake	–	27	–	–	2	*	180	16	193	247	–	16	2	2	836	1,143
Jefferson	2	82	–	5	–	–	9	67	297	517	8	95	32	–	1,417	1,639
Kenosha	–	–	–	2	–	–	–	1	11	37	–	–	–	–	59	62
Kewaunee	42	109	–	–	37	14	39	–	68	36	3	50	10	–	840	1,144
Manitowoc	92	292	–	–	55	9	141	8	572	177	–	138	14	–	2,835	3,558
Milwaukee	–	2	–	1	–	–	–	–	3	–	–	–	–	–	6	10
Outagamie	31	99	–	–	92	5	331	13	133	116	10	45	27	*	1,619	2,068
Ozaukee	9	32	–	–	27	–	–	1	102	10	–	24	–	–	507	519
Racine	–	2	–	–	–	–	–	–	37	17	8	–	–	–	66	121
Rock	–	15	3	10	2	–	–	21	73	198	–	3	8	–	343	547
Sheboygan	96	379	8	–	38	9	204	27	768	322	–	228	15	*	3,185	3,330
Walworth	–	18	–	–	1	–	–	5	31	62	–	5	–	–	121	411
Washington	5	77	*	–	*	–	14	2	162	54	3	47	4	*	848	905
Waukesha	–	40	–	3	–	–	3	5	122	91	3	20	*	–	398	571
Winnebago	–	61	1	–	–	–	438	3	681	226	–	61	–	–	2,012	2,435
Total	343	1,822	69	123	471	111	3,503	387	8,423	5,156	42	1,410	334	3	30,463	36,204
State total	1,199	19,498	320	970	1,737	1,066	313,605	2,100	175,026	48,440	99	41,716	4,384	578	805,728	1,006,846

* = *Less than 500 board feet.*

[1] *International 1/4-inch rule.*

Table 22.--*Harvest residues generated by industrial roundwood harvesting by Forest Survey Unit, county, and species group, Wisconsin, 1996*

(In thousand cubic feet)

Forest Survey Unit and county	Balsam fir	E. red-cedar	Tama-rack	Spruce	Jack pine	Red pine	White pine	N. white-cedar	Hemlock	Total softwoods	Soft maple	Hard maple	White birch	River birch	Yellow birch	Hickory	Hack-berry
Northeast																	
Florence	75	--	4	43	164	120	11	1	90	509	154	617	359	--	115	--	--
Forest	238	--	5	109	54	254	44	9	95	809	383	1,024	573	--	152	*	--
Langlade	270	--	10	69	20	95	17	1	23	506	484	1,108	525	--	96	2	--
Lincoln	133	--	22	50	58	183	58	*	9	514	454	575	367	--	58	*	--
Marinette	103	--	11	62	529	514	80	50	31	1,380	400	498	476	--	117	3	--
Menominee	66	--	9	30	109	128	160	42	323	867	356	735	98	--	44	11	--
Oconto	16	--	1	37	91	144	41	31	7	368	123	161	289	--	41	*	--
Oneida	291	--	85	113	175	530	174	1	14	1,383	275	440	734	--	76	--	--
Shawano	7	--	8	4	13	66	51	52	21	222	271	616	96	--	30	7	--
Vilas	152	--	4	47	861	435	143	2	5	1,649	182	382	801	--	66	--	--
Total	1,350	--	159	563	2,076	2,470	781	189	618	8,207	3,082	6,156	4,318	--	795	23	--
Northwest																	
Ashland	115	--	10	92	42	118	80	1	4	462	303	528	319	--	71	3	--
Barron	*	--	*	8	9	38	51	--	--	106	68	96	74	--	3	2	*
Bayfield	131	--	1	57	1,465	685	268	*	3	2,609	285	377	732	--	23	--	--
Burnett	*	--	5	14	746	327	72	--	--	1,163	57	69	95	--	4	--	--
Douglas	664	--	9	134	1,163	492	63	*	--	2,526	135	217	564	--	7	--	--
Iron	244	--	5	85	49	54	34	*	11	482	316	524	420	--	83	--	--
Polk	1	--	1	1	290	76	5	--	*	373	82	55	75	--	2	--	--
Price	138	--	67	105	256	299	37	1	3	907	492	594	421	--	50	--	--
Rusk	9	--	6	15	5	57	14	--	1	106	383	572	300	--	31	25	6
Sawyer	110	--	7	82	83	230	94	--	4	610	619	894	927	--	68	1	--
Taylor	77	--	12	12	5	45	20	--	23	194	551	428	254	--	31	1	--
Washburn	45	--	26	9	853	314	35	*	*	1,284	163	144	210	--	14	--	2
Total	1,535	--	148	614	4,964	2,733	774	2	49	10,821	3,454	4,499	4,390	--	387	32	8
Central																	
Adams	1	--	*	*	701	618	174	--	--	1,494	17	18	12	*	*	1	--
Chippewa	1	--	5	*	1	157	61	--	2	228	153	93	85	--	6	1	*
Clark	*	--	2	1	144	82	126	--	2	357	375	305	251	--	21	42	--
Eau Claire	--	--	--	*	108	142	20	--	--	271	85	95	62	--	4	2	--
Jackson	4	--	1	5	602	244	149	--	1	1,005	316	247	121	*	6	38	--
Juneau	--	--	--	*	529	275	95	--	--	899	70	64	37	*	2	4	--
Marathon	9	--	--	6	32	104	59	*	17	227	459	691	128	--	57	9	--
Marquette	--	--	--	--	17	158	31	*	--	206	8	8	6	--	1	--	--
Monroe	--	--	3	--	276	109	48	--	--	437	73	79	26	--	1	12	*
Portage	1	--	5	5	179	361	82	--	7	640	141	66	44	--	6	2	--
Waupaca	--	--	1	1	5	122	100	5	3	238	213	149	30	--	5	2	--
Waushara	*	--	*	1	26	398	66	*	*	493	25	36	11	--	1	--	--
Wood	--	--	--	7	134	103	59	--	*	303	79	73	34	--	3	3	--
Total	16	--	18	28	2,755	2,873	1,069	6	31	6,796	2,015	1,926	847	*	113	117	1

Southwest																	
Buffalo	–	–	–	2	*	22	7	–	–	31	63	47	29	*	*	29	2
Crawford	–	–	–	1	–	9	3	–	–	12	34	111	2	–	–	14	1
Dunn	–	–	–	5	37	290	53	–	–	385	138	123	47	*	3	5	1
Grant	–	–	–	–	*	74	9	–	–	83	40	108	1	*	*	18	7
Iowa	–	–	*	2	27	29	25	–	–	83	17	36	1	*	*	11	1
La Crosse	–	–	–	–	29	35	6	–	–	69	31	20	10	–	–	15	2
Lafayette	–	–	–	–	–	*	*	–	–	1	*	*	*	–	–	*	–
Pepin	–	*	–	5	4	21	12	–	–	42	33	32	10	–	*	7	–
Pierce	–	–	–	2	–	4	15	–	–	20	5	156	5	–	*	10	–
Richland	–	–	–	*	15	20	7	–	–	43	54	204	1	–	–	29	1
Sauk	*	1	–	1	41	123	38	–	–	204	107	101	15	*	*	28	*
St. Croix	–	1	–	8	4	38	11	–	–	63	31	33	18	–	*	2	–
Trempealeau	–	–	–	–	2	142	17	–	–	161	43	22	22	*	*	14	*
Vernon	–	–	–	–	*	11	13	–	–	24	32	263	2	–	–	20	*
Total	*	3	*	26	159	818	217	–	–	1,223	628	1,256	163	*	4	203	16
Southeast																	
Brown	–	–	–	1	1	24	11	11	4	52	25	29	5	–	*	1	–
Calumet	–	–	–	*	–	–	16	3	–	19	26	10	*	–	–	*	–
Columbia	1	–	–	4	13	84	13	–	–	115	8	14	3	*	*	4	*
Dane	–	–	–	1	*	3	5	*	–	9	8	13	1	–	–	7	1
Dodge	–	–	–	–	–	*	1	1	*	2	18	14	–	–	–	4	*
Door	3	–	–	12	*	12	19	13	3	62	7	19	48	–	9	1	–
Fond Du Lac	–	–	–	*	–	1	4	–	–	6	27	8	1	–	*	1	*
Green	–	–	–	–	1	4	2	–	–	7	5	21	–	–	–	5	–
Green Lake	–	–	–	2	2	25	11	*	–	40	10	6	1	–	*	2	–
Jefferson	–	–	–	*	*	10	14	*	–	26	21	11	*	–	*	3	–
Kenosha	–	–	–	–	–	–	*	–	–	*	–	–	–	–	–	1	–
Kewaunee	–	–	1	1	–	2	5	16	4	29	36	11	3	–	*	1	–
Manitowoc	*	–	–	3	6	20	24	15	3	72	95	49	3	–	1	3	*
Milwaukee	–	–	–	–	–	*	–	–	*	*	–	–	–	–	–	–	–
Outagamie	–	–	–	3	–	19	16	9	1	48	67	25	13	–	2	3	–
Ozaukee	–	–	–	–	–	–	1	*	–	1	34	3	–	–	–	–	*
Racine	–	–	–	6	3	–	3	–	–	12	*	*	*	–	*	–	–
Rock	*	–	–	1	1	20	5	*	–	27	*	*	–	–	–	–	*
Sheboygan	1	–	–	1	–	6	5	3	–	16	31	74	3	–	1	1	*
Walworth	–	–	2	1	–	23	12	–	–	39	–	–	–	–	–	–	–
Washington	–	–	–	2	–	1	4	*	*	8	28	27	*	–	*	1	1
Waukesha	–	–	–	3	1	8	9	*	–	21	7	6	*	–	*	*	*
Winnebago	–	–	–	–	–	7	24	–	–	32	42	20	1	–	–	1	*
Total	6	–	3	43	27	271	205	73	15	643	495	361	81	*	13	40	3
State total	2,908	3	329	1,273	9,982	9,166	3,046	270	713	27,690	9,674	14,198	9,800	*	1,312	415	28

(Table 22 continued on next page)

(Table 22 continued)

Forest Survey Unit and county	Beech	Ash	Butter-nut	Black walnut	Cotton-wood	Balsam poplar	Aspen	Black cherry	Red oak	White oak	Willow	Bass-wood	Elm	Other hardwoods	Total hardwoods	All species
Northeast																
Florence	*	81	--	--	*	54	1,369	2	130	8	--	268	8	4	3,169	3,678
Forest	4	187	1	--	1	31	2,515	8	213	29	--	540	96	6	5,763	6,572
Langlade	4	210	1	*	1	6	2,350	8	270	40	--	481	71	6	5,663	6,169
Lincoln	5	207	1	--	3	3	2,387	1	192	22	--	230	155	17	4,678	5,192
Marinette	11	194	--	*	3	85	3,199	7	770	46	--	210	5	3	6,029	7,409
Menominee	55	89	2	--	*	11	1,263	4	449	312	--	304	80	19	3,830	4,697
Oconto	7	55	*	--	4	13	1,175	--	235	25	--	77	12	2	2,218	2,586
Oneida	*	141	*	--	2	8	1,544	2	197	30	--	177	17	16	3,660	5,043
Shawano	20	103	1	1	2	1	611	8	352	19	--	155	46	*	2,339	2,561
Vilas	*	95	--	--	1	6	1,332	*	150	24	--	88	8	11	3,146	4,795
Total	108	1,363	7	1	17	217	17,744	41	2,958	555	--	2,531	497	84	40,496	48,703
Northwest																
Ashland	*	111	--	--	*	1	1,329	1	256	21	--	113	7	3	3,066	3,528
Barron	--	39	1	*	*	1	975	*	385	91	--	106	2	3	1,846	1,952
Bayfield	--	109	1	--	*	1	2,504	--	471	36	--	41	5	3	4,588	7,198
Burnett	--	25	*	--	*	*	1,092	*	105	33	--	14	2	3	1,499	2,662
Douglas	--	38	--	--	*	5	2,046	--	100	9	--	193	1	2	3,316	5,842
Iron	3	147	*	--	1	1	2,441	6	163	16	--	158	80	14	4,372	4,854
Polk	1	28	*	--	*	*	833	*	200	84	--	27	2	2	1,391	1,764
Price	1	199	--	--	2	2	2,044	1	198	42	--	211	25	15	4,296	5,202
Rusk	*	193	1	--	1	1	1,464	1	611	103	--	278	18	6	3,994	4,100
Sawyer	1	213	1	--	*	*	2,684	2	580	65	--	343	22	6	6,427	7,036
Taylor	2	166	*	--	1	1	1,458	1	183	43	--	262	59	4	3,444	3,638
Washburn	*	50	*	--	*	*	2,012	*	194	32	--	22	4	3	2,852	4,135
Total	8	1,317	5	*	5	12	20,881	14	3,445	573	--	1,770	227	64	41,091	51,912
Central																
Adams	--	11	*	--	*	*	176	1	395	74	--	7	2	2	717	2,211
Chippewa	--	64	1	--	*	*	750	2	389	130	--	59	2	2	1,738	1,966
Clark	1	121	*	--	1	*	1,723	*	573	292	--	43	25	4	3,777	4,134
Eau Claire	*	34	*	--	1	*	433	2	390	109	--	12	3	4	1,235	1,506
Jackson	--	80	--	--	5	*	589	6	1,413	315	--	35	6	8	3,184	4,189
Juneau	--	29	*	--	*	1	128	4	784	216	--	38	7	3	1,387	2,286
Marathon	6	194	1	*	*	*	1,136	4	352	81	--	245	104	3	3,469	3,696
Marquette	--	5	--	--	*	*	22	--	51	31	--	2	*	1	134	340
Monroe	--	33	1	--	1	*	206	9	882	238	--	32	14	3	1,612	2,049
Portage	*	32	--	--	*	*	390	--	237	55	--	17	9	1	1,000	1,640
Waupaca	6	52	1	1	4	1	266	*	319	82	--	92	17	2	1,243	1,480
Waushara	--	12	--	--	*	*	66	--	198	58	--	17	1	1	427	919
Wood	--	24	*	--	*	*	731	1	233	48	--	18	1	1	1,249	1,552
Total	13	691	5	1	13	2	6,616	27	6,216	1,729	--	617	190	34	21,173	27,969

Southwest																
Buffalo	–	17	–	*	37	1	311	20	1,000	198	*	48	11	1	1,814	1,845
Crawford	–	30	1	24	1	*	15	6	423	155	–	55	14	*	887	899
Dunn	*	66	2	–	6	1	337	9	360	181	–	57	8	2	1,345	1,730
Grant	–	50	3	35	32	–	27	9	536	205	5	82	30	*	1,189	1,272
Iowa	–	22	1	28	–	–	20	6	293	146	–	40	8	–	631	714
La Crosse	–	21	1	2	3	–	31	8	633	178	–	48	20	1	1,023	1,093
Lafayette	–	2	–	2	–	–	–	2	13	19	–	3	*	–	41	42
Pepin	–	20	–	–	3	*	129	1	133	54	–	30	3	1	457	499
Pierce	–	16	*	*	13	*	63	*	163	49	–	68	6	*	555	576
Richland	–	47	3	8	–	*	90	6	520	157	–	86	26	–	1,233	1,276
Sauk	–	43	4	2	*	*	274	21	714	215	–	71	21	1	1,619	1,823
St. Croix	–	8	*	–	1	–	271	*	112	28	–	24	2	*	529	592
Trempealeau	–	10	–	*	20	1	180	16	558	150	1	26	6	2	1,073	1,234
Vernon	–	33	1	3	–	–	23	12	551	256	1	89	21	*	1,304	1,328
Total	*	383	15	103	116	3	1,772	118	6,007	1,991	7	728	176	9	13,699	14,923
Southeast																
Brown	4	19	–	–	19	29	277	2	32	18	–	17	1	*	478	529
Calumet	–	8	*	–	4	–	*	*	12	4	–	4	*	*	70	88
Columbia	–	3	1	1	*	–	19	2	209	75	–	10	1	*	349	465
Dane	–	6	4	2	1	–	8	10	158	115	–	17	5	*	356	365
Dodge	*	9	*	1	–	–	3	10	35	59	1	13	5	–	172	174
Door	4	11	1	–	2	–	33	1	8	–	–	7	1	*	152	215
Fond Du Lac	1	10	*	*	3	–	6	*	15	10	–	2	1	–	84	89
Green	–	11	–	10	–	–	3	2	73	37	–	11	14	–	191	199
Green Lake	–	4	–	–	*	*	12	2	26	28	–	3	*	*	93	133
Jefferson	*	10	–	1	–	–	1	8	31	53	1	11	4	–	156	182
Kenosha	–	–	–	*	–	–	–	*	1	4	–	–	–	–	6	7
Kewaunee	5	14	–	–	4	2	4	–	7	4	*	6	1	–	99	129
Manitowoc	11	32	–	–	7	1	17	1	53	15	–	15	2	–	304	376
Milwaukee	–	*	–	*	–	–	–	–	*	–	–	–	–	–	1	1
Outagamie	4	16	–	–	12	1	53	2	14	12	1	6	3	*	235	283
Ozaukee	1	4	–	–	3	–	–	*	11	1	–	3	–	–	61	62
Racine	–	*	–	–	–	–	–	–	4	2	1	–	–	–	7	19
Rock	–	2	*	1	*	–	–	3	8	20	–	*	1	–	37	64
Sheboygan	12	42	1	–	5	1	26	3	73	30	–	27	1	*	332	348
Walworth	–	2	–	–	*	–	–	1	3	6	–	1	–	–	13	52
Washington	1	10	*	–	*	–	2	*	17	6	*	6	*	*	100	107
Waukesha	–	5	–	*	–	–	*	1	13	9	*	3	*	–	45	66
Winnebago	–	8	*	–	–	–	52	*	71	23	–	8	–	–	224	256
Total	42	227	9	16	59	34	515	48	872	532	5	171	42	1	3,566	4,209
State total	171	3,981	40	121	210	268	47,528	249	19,497	5,380	12	5,817	1,132	191	120,025	147,715

* *= Less than 500 cubic feet.*

Rows and columns may not sum due to rounding.

Table 23.--*Residue produced at primary wood-using mills by Forest Survey Unit, type of use, and residue type, Wisconsin, 1996*

(In thousand tons, green weight)

Forest Survey Unit and type of use	Wood residue: Total wood residue		Coarse		Fine		Bark	
	Softwood	Hardwood	Softwood	Hardwood	Softwood	Hardwood	Softwood	Hardwood
Northeast								
Fiber products	48.16	230.81	47.77	225.16	0.39	5.65	0.07	5.17
Charcoal	--	5.61	--	--	--	5.61	--	--
Industrial fuel-mill	16.97	79.06	0.18	15.02	16.80	64.03	20.66	95.95
Industrial fuel-sold	2.18	50.98	0.72	17.58	1.46	33.39	1.69	62.49
Domestic fuel	2.99	27.65	2.96	25.45	0.03	2.20	0.66	5.79
Miscellaneous	5.90	107.52	0.57	27.24	5.34	80.28	4.52	46.66
Not used	1.30	4.88	0.37	3.53	0.92	1.34	0.68	1.53
Total	77.51	506.50	52.57	313.99	24.94	192.51	28.28	217.58
Northwest								
Fiber products	33.60	86.42	33.09	77.16	0.52	9.26	0.43	0.69
Charcoal	--	1.72	--	1.72	--	--	--	0.73
Industrial fuel-mill	10.60	68.75	0.23	27.51	10.36	41.24	13.63	79.34
Industrial fuel-sold	3.41	76.42	1.07	24.01	2.34	52.41	4.11	110.78
Domestic fuel	2.96	11.76	2.95	11.61	0.01	0.15	1.22	3.26
Miscellaneous	1.96	35.12	0.02	7.71	1.94	27.40	0.03	9.90
Not used	3.54	4.66	1.91	2.27	1.63	2.38	0.88	1.41
Total	56.07	284.84	39.27	151.99	16.80	132.85	20.29	206.11
Central								
Fiber products	12.20	124.63	12.20	105.80	*	18.83	--	2.70
Industrial fuel-mill	95.60	115.54	0.09	11.32	95.52	104.22	211.05	239.60
Industrial fuel-sold	0.87	22.26	0.20	10.37	0.67	11.90	1.83	65.84
Domestic fuel	6.57	25.16	6.57	25.16	*	*	0.61	2.88
Miscellaneous	13.53	45.52	1.17	1.02	12.36	44.50	12.20	47.34
Not used	3.77	5.73	0.26	2.28	3.52	3.45	7.41	13.31
Total	132.54	338.83	20.48	155.94	112.06	182.89	233.11	371.66

Southwest								
Fiber products	1.17	116.55	1.17	116.55	–	–	–	–
Charcoal	–	0.14	–	0.14	–	–	–	0.06
Industrial fuel-mill	1.66	11.46	0.49	9.28	1.17	2.18	0.13	1.56
Industrial fuel-sold	7.16	41.73	4.22	5.13	2.94	36.60	3.05	9.71
Domestic fuel	1.16	42.64	1.16	42.21	–	0.43	0.07	5.40
Miscellaneous [3]	6.23	64.24	3.72	8.02	2.51	56.22	2.15	60.22
Not used	0.31	2.37	0.23	1.91	0.08	0.46	0.04	1.00
Total	17.70	279.14	11.00	183.25	6.70	95.89	5.45	77.95
Southeast								
Fiber products	1.77	34.69	1.77	34.69	–	–	–	–
Charcoal	–	0.04	–	–	–	0.04	–	–
Industrial fuel-mill	23.63	11.50	0.01	0.24	23.62	11.26	60.05	29.26
Industrial fuel-sold	0.17	13.94	0.17	1.32	–	12.62	–	9.21
Domestic fuel	0.93	8.03	0.93	8.00	0.01	0.03	0.28	2.63
Miscellaneous [3]	4.18	26.68	1.48	11.50	2.70	15.18	2.11	12.25
Not used	0.31	0.49	0.22	0.24	0.09	0.26	0.12	0.27
Total	30.98	95.37	4.57	55.98	26.41	39.39	62.56	53.61
All Units								
Fiber products	96.90	593.09	95.99	559.35	0.91	33.74	0.50	8.55
Charcoal	–	7.51	–	1.85	–	5.65	–	0.79
Industrial fuel-mill	148.47	286.30	1.01	63.37	147.46	222.93	305.53	445.71
Industrial fuel-sold	13.78	205.33	6.37	58.41	7.41	146.92	10.69	258.03
Domestic fuel	14.61	115.24	14.57	112.43	0.04	2.81	2.83	19.95
Miscellaneous[3]	31.80	279.08	6.96	55.50	24.85	223.59	21.00	176.37
Not used	9.23	18.13	2.99	10.24	6.24	7.89	9.13	17.51
Total	314.80	1,504.67	127.89	861.15	186.91	643.52	349.68	926.91

* *= Less than 50 tons.*

[1] *Suitable for chipping such as slabs, edgings, veneer cores, etc.*

[2] *Not suitable for chipping such as sawdust, veneer clippings, etc.*

[3] *Livestock bedding, mulch, small dimension, and specialty items.*

Rows and columns may not sum due to rounding.

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2002. **Wisconsin timber industry—an assessment of timber product output and use, 1996.** Resour. Bull. NC-201. St. Paul, MN: U.S. Department of Agriculture, Forest Service, North Central Research Station. 74 p.

Discusses recent Wisconsin forest industry trends; production and receipts of pulpwood, saw logs, and veneer logs; and production of other timber products in 1996. Reports on logging residue, on wood and bark residue generated at primary wood-using mills, and on disposition of mill residues.

KEY WORDS: Industrial roundwood, pulpwood, saw logs, veneer logs, residue